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THE UNIVERSITY OF ALBERTA

AN ANALYSIS OF WALDEN TWO

by



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A THESIS

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ARTICULATE

This study was designed to show by analyzing the book Walden Two

can function as a source of Skinner's thoughts on behavior and environ-

tional impact. The undersigned certify that they have read, and

recommend to the Faculty of Graduate Studies for acceptance,

a thesis entitled AN ANALYSIS OF WALDEN TWO submitted by

Dale J. McLaren in partial fulfilment of the requirements for

the degree of Master of Education.

Life of Walden Two was described as

featuring an analysis of the book, history, and other necessities of

ABSTRACT

This study was designed to clarify whether or not *Walden Two* can function as a source of Skinner's thoughts on matters of educational importance. Basically the study presented educationally significant viewpoints which seem prominent in *Walden Two*, and checked whether or not Skinner agrees with these positions by referring to selected nonfictional works.

In Chapter Three, the Good Life of *Walden Two* was described as featuring an abundance of freedom, harmony, and other necessities of life. The happy, healthy, and productive people living the Good Life were pictured valuing diversity and individuality as aspects of cultural strength. It was suggested that education, persuasion, and time are portrayed in *Walden Two* as the only effective means of bringing about social improvement. Evidence was presented to show that Skinner supports these positions in his nonfictional work.

In Chapter Four Frazier's conception of human nature was described. It was argued that he conceives of man as a completely determined being: a self-determining environmentally controlled organism which cannot be effectively controlled by punishment; an organism which not only can but will revolt under certain circumstances. It was further argued that Frazier does not conceive of man as limitlessly plastic and that, far from denying the existence of human nature, he believes human nature exists and cannot be changed.

He was also described as believing the power of positive reinforcement need not be greatly feared. Evidence was presented indicating that Skinner supports the majority of these assumptions about human nature but that he disagrees with Frazier concerning the possible dangers inherent in the power of positive reinforcement.

In Chapter Five the nature of education in *Walden Two* was described. It was argued that the utopia presents traditional education as being badly in need of revision because there is little relationship between its philosophy and its practices. It was also argued that in *Walden Two* the aims of education are presented as beyond debate. Evidence was provided indicating Skinner's support of these positions.

As a result of the investigation it was concluded that *Walden Two* can provide the reader with an accurate indication of Skinner's views on topics relevant to education, but it was also noted, by referring to a number of critics mentioned in the review of related literature, that in several instances the book failed to do so. It was concluded finally that *Walden Two* definitely contains reliable information about Skinner's views on matters of educational importance but that it does not necessarily provide such information readily.

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Chapter 1

INTRODUCTION

The study from which this thesis evolved began with an interest in the writings of Burrhus Frederic Skinner, a man generally recognized as one of the foremost thinkers in modern psychology. *Walden Two*, a unique source among his works, proved to be a particularly interesting book and it became the focal point of this investigation.

The uniqueness and interest associated with *Walden Two* are related, at least in part, to the utopian design of the work. The question arises as to whether or not Skinner has used the novel to convey his thoughts on a variety of subjects. Whether or not *Walden Two* provides the reader with reliable information about Skinner's views is a complicated question. The reader does not know if one or more of the characters in the story reflects Skinner's views. Further, the reader does not know when a serious argument has been presented for a particular position and when the dialogue or debate is designed to provoke the reader to pay serious attention to the question at issue.

One way to approach this difficult problem is to identify arguments and viewpoints that appear significant in *Walden Two* without regard to Skinner's position. Following the initial identification one can ascertain from Skinner's nonfictional work whether or not Skinner agrees with the positions as identified and described.

THE MAIN PROBLEM

Bertrand de Jouvenel¹ maintained that one of the most important aspects of any utopia is the fact that it provides reliable information regarding the utopist's own views. The purpose of this thesis was to clarify whether or not de Jouvenel's contention applies to *Walden Two* as a source of Skinner's thoughts on matters of educational importance. The main problem of the present study then was formulated in the following question: Does *Walden Two* provide the reader with reliable information about Skinner's views on subjects relevant to education? Two subproblems seemed to constitute a way of arriving at an answer to this major question. These subproblems are:

1. What are some of the more prominent viewpoints and arguments found in *Walden Two* which are relevant to education?
2. What evidence is there in Skinner's nonfictional work that indicates his agreement or disagreement with these viewpoints and arguments?

RATIONALE FOR THE STUDY

The present thesis was judged to be a worthwhile and important undertaking for the following reasons:

1. *Walden Two* is a modern utopia concerned with the implications of a science of behavior. Skinner is particularly qualified to write about the modern problems involved in the design of cultures because he has been one of the main driving forces behind the emerging science of behavior. He has been referred to as "Mr. Behaviorist" by

Mary Harrington Hall, and in the same article it was claimed that, ". . . when history makes its judgment, he may well be known as the major contributor to psychology in this century."²

Walden Two commands attention however, not simply because of Skinner's success as a behavioral scientist and not simply because it deals with the application of scientific knowledge to human affairs. *Walden Two* commands attention because Skinner is a scholar of immense stature.

. . . It is . . . the purity and elegance of his laboratory research, indicating intense dedication and discipline; it is his breadth of acquaintance with all sorts of literature; it is the originality in style found in everything he touches -- these provide Skinner with a warrant or license to declaim on human nature and command attention, though not necessarily our agreement.³

Written by a respected scholar, one of the most prominent social scientists of the twentieth century, *Walden Two* is a book which merits detailed consideration.

2. In general, the critics of *Walden Two* have tended to assume that Frazier, the individual in the novel responsible for originating the ideal community, is Skinner's persona. The legitimacy of such an identification is questionable. The advisability of attempting to identify one character in a utopia as the utopist's persona was questioned by David M. Bevington⁴ in relation to More's *Utopia* when he pointed out that the work can be viewed as a balanced presentation of two points of view representing the polarities of More's own mind. His argument applies to Skinner's utopia also. It is possible that at any particular point in *Walden Two*, one, none, or many of the characters contribute to the conveyance of Skinner's viewpoint. Perhaps when the protagonist Frazier and the visitor Burris agree, or when the

antagonist Castle fails to challenge a position adopted by Frazier, the reader can infer Skinner's agreement, but this is not obviously so. Whether or not *Walden Two* provides the reader with accurate information about Skinner's views on subjects relevant to education needed to be clarified without assuming to begin with that particular arguments and viewpoints which are found in *Walden Two* are Skinner's.

3. While there is a great deal of material available relevant to *Walden Two*, the discussion in this material has been mainly concerned with the practicability or the desirability of the hypothetical community described in the book. Reactions to this hypothetical community have ranged from the sarcasm of Donald C. Williams in his article "The Social Scientist as Philosopher and King" to the polite horror of Negley and Patrick in *The Quest for Utopia*. In contrast, the present study was not concerned with such matters and is therefore distinctive in nature.

DELIMITATIONS

1. Interpretation of *Walden Two* necessarily took place in the process of this investigation. No attempt was made to contact Skinner directly to check the validity of this interpretation. Instead, the writer chose to work from the literature available. The interpretation of *Walden Two* that has been carried out in the course of this study was not intended to be beyond question.

2. An attempt was made in this thesis to describe the relevant arguments and viewpoints presented in *Walden Two*. For the most part, *only* those points which are verbalized or implied in the utopia were mentioned. It was not considered part of the purpose of this thesis to

comment on the shortcomings of the prominent positions described here by enumerating ways in which these positions remain unclear. For example, it is argued in *Walden Two* that thinking can be taught as a separate skill. The fact that no argument is presented in the book elaborating what thinking is, or how it can be taught, does not change the fact that an argument is present suggesting that something known as thinking can be taught somehow.

Furthermore, it was not considered part of the purpose of this thesis to clarify such arguments by going to the nonfictional work. In the example mentioned above, the only reason for looking at the non-fictional work was to verify whether or not Skinner agrees with the argument described as present in *Walden Two*. Finally, for each argument considered, the evidence presented was selected from the non-fictional material which seemed to be the best and the clearest representation of Skinner's position. For example, in Chapter Four consideration of Skinner's nonfictional viewpoint was essentially limited to *Science and Human Behavior* and in Chapter Five it was limited to *The Technology of Teaching*.

4. No attempt was made in this thesis to decide whether or not one character in the novel serves as the spokesman for Skinner. The arguments identified in this study can be attributed variously to *Walden Two* as a whole, to Frazier, and to Frazier as spokesman for the imaginary community. No assertion was being made to begin with that they were (or are) Skinner's arguments. The intention was simply to describe them and then consider evidence related to the confidence with which they might be identified as Skinner's views.

5. No attempt was made to consider all the arguments or viewpoints inherent in *Walden Two*. Those chosen for consideration were judged to be the more important and the more relevant for educators. No attempt was made to resolve any of the issues which they raise.

BASIC ASSUMPTIONS

1. The word utopia is sometimes used as a synonym for the perfect social order, but it may also be used legitimately to refer to a particular kind of literary work. A utopia is a distinct vehicle of expression.⁵ Typically it is a descriptive visitor's account of a society that would supposedly deserve the reader's full approval. Such an imaginary society is essentially a focal point for a discussion of some institutional scheme being recommended by the utopist. Vivid and dramatic descriptions are employed to paint a pleasing picture of the fruit borne by the underlying institutions.⁶ Wit, adventure, and romance are mere frills designed to make the suggestions more palatable, "a kind of obvious cosmetic designed to make the offering more attractive."⁷

2. When a writer uses the utopian genre to try to convince readers of the worthiness of a particular institutional scheme, he likely provides the reader with some reliable information about his own views. Bertrand de Jouvenel argued this point quite convincingly. He claimed:

. . . Since the author strives to lure us by way of pictures, he must have painted those which seem to him most alluring. Therefore, he must have represented in his descriptions of every day life in utopia his dream of "life at its best" for a whole people: in other words, the images he uses for our seduction reveal his own dreams.⁸

On the other hand it is entirely possible that a utopia may contain a certain amount of unreliable information, in the sense that it does not reflect the utopist's personal views. A utopist may flavour his work for public taste by saying things he thinks the readers want to hear.

3. Because *Walden Two* is a fictional work, the reader must accept the possibility that at any particular time, Skinner might be using one, some, or all of the characters as his persona. On the other hand, he might not be using any of them.

STATEMENT OF PROCEDURE

The current investigation began with an examination of *Walden Two*. The desire to understand the book as completely as possible led to a review of literature related directly to it, and to a survey of all of Skinner's available published writings. The difficulties involved in interpreting *Walden Two* became evident at this stage of the study and seemed to be related to the nature of *Walden Two* as a utopia.

In order to clarify, in the writer's mind, what was implied when *Walden Two* was described as a utopia, a survey of literature concerned with utopianism was carried out. Two characteristics of utopias were singled out as particularly important for the purposes of this study. They were included in the thesis as basic assumptions.

Walden Two was then re-examined in detail bearing in mind how others had analysed it. Viewpoints which seemed to be inherent in the utopia were selected for further consideration. Skinner's nonfictional

writing was then re-examined in a search for evidence that Skinner agrees or disagrees with the viewpoints. It was expected that support of the *Walden Two* positions in the nonfictional work would constitute evidence that Skinner's utopia can provide the reader with reliable information about his views.

The next step in the study was an evaluative discussion of the main problem of the thesis. This phase of the study involved generalizing from the evidence which was found in the course of the investigation. Finally, the findings and conclusions of the study were summarized.

STATEMENT OF ORGANIZATION BY CHAPTERS

Chapter One includes background information as well as a statement of the main problem and its subproblems, a rationale for the study, a statement of delimitations and a specification of basic assumptions. This chapter is concluded with a statement on research procedures and a statement on chapter organization.

The main body of the thesis follows the review of related literature which is found in Chapter Two. Chapter Three deals with the concept of social improvement inherent in *Walden Two* and with the evidence which suggests whether or not Skinner agrees with that position. Chapter Four is concerned with assumptions which seem to be made in *Walden Two* about human nature and the control of behaviour. It is also concerned with evidence from the nonfictional work which shows whether or not Skinner makes the same assumptions. Chapter Five contains a description of the nature of education as it is found in *Walden Two* and evidence which indicates Skinner's agreement or

disagreement with the position described. Chapter Six contains the generalizations and conclusions of the thesis along with a brief summary of the entire study.

¹Bertrand de Jouvenel, "Utopia for Practical Purposes," *Utopias and Utopian Thought*, ed. Frank E. Manuel (Boston: Beacon Press, 1967), p. 221.

²Mary Harrington Hall, "An Interview with 'Mr. Behaviorist' B. F. Skinner," *Psy. Today*, 1:21, September, 1967.

³James E. McClellan, "B. F. Skinner's Philosophy of Human Nature," *Psychological Concepts in Education*, eds. B. Paul Komisar and C. B. J. MacMillan (Chicago: Rand McNally & Co., 1967), p. 228.

⁴David M. Bevington, "The Divided Mind," *Twentieth Century Interpretations of Utopia*, ed. W. Nelson (Englewood Cliffs, N. J.: Prentice-Hall, 1968), p. 77.

⁵Glen Negley and J. Max Patrick, *The Quest for Utopia* (New York: Henry Schuman, 1952), p. 3.

⁶de Jouvenel, loc. cit.

⁷Negley & Patrick, op. cit., p. 5.

⁸de Jouvenel, loc. cit.

Chapter 2

RELATED LITERATURE

The literature related to the main problem of this thesis can be classified into two main groups: 1. critical literature directly related to *Walden Two*; and 2. Skinner's nonfictional writing. Because of the wealth of material available, the review which follows will be limited to those aspects of the literature which were deemed to be most relevant for the present study.

LITERATURE DIRECTLY RELATED TO *WALDEN TWO*

Those critics who provided the initial reaction to *Walden Two*, generally were not favourably disposed toward the work. Some of the criticism followed the form adopted in the June, 1948 issue of *Life*. The critic commented on *Walden Two* in the following manner:

. . . Dr. Skinner's utopia is a triumph of "cultural engineering" and "behavioral engineering" where the conditioned reflex is king. Boards of planners unobtrusively tell every big and little Skinnerite exactly what he or she must do. Once they are trained, the inhabitants of *Walden Two* have "freedom." But it is the freedom of those pavlovian dogs which are free to foam at the mouth whenever the "dinner" bell invites them to a nonforthcoming meal. The very possibility of random personal choice has been eliminated from Dr. Skinner's world by a hierarchy which alone has the right to experiment. The desires, not the sins, of the fathers are visited upon the children to the third and fourth generation. Such a triumph of mortmain, or the dead hand, has not been envisaged since the days of Sparta.¹

A year later Donald C. Williams published his assessment of *Walden Two*. Williams described the inhabitants of *Walden II*² as

"inmates," the adults as "amiable zombies," and the children as "colorless little larvae." For Williams, Frazier "chirps" instead of talking, and Skinner tackles philosophy "with the gaily bellicose irresponsibility of a kitten on the keys."³ Williams argued that in writing *Walden Two* Skinner undertook a task he was not qualified to perform. He characterized Skinner's efforts as those of an agile amateur, an innocent in the field of philosophy, and claimed:

. . . Our aspirant is carried along first by the natural illusion that a scientific philosophy will result automatically from a scientist's philosophizing, and then again by a resolute faith that a sufficient contempt and neglect of the tough professional core of the subject will make it contemptible and negligible. The foredoomed result, in all innocence, is a repetition of venerable fallacies, brightened by much cheerful bravado about behavioral engineering and the experimental method.⁴

Williams ignored the fact that *Walden Two* was never intended as a rigorous philosophical treatise and outlined his own version of Skinner's supposedly inadequate philosophy. He felt that *Walden II* was ruled by a psychological elite. He saw this elite as apparently having unlimited power to design personalities at will. He pointed out that the safeguards against despotism in *Walden II* were rather weak when he said: ". . . the one consideration supposed to check the Managers is that if they become tyrants their dominion in a thousand years or so will decay and be displaced like India's."⁵

Despite his critical stance Williams saw some merit in *Walden Two*. He did not feel that the merit was there by Skinner's design, instead it was what Professor Skinner conveyed in spite of himself.⁶ He commented: "The Lord Frazier had to gather his original remnants into the Ark, not by irrational compulsions, but by arguments which satisfied their interest in probable truth."⁷

In 1952 Negley and Patrick published a book containing, among other things, their comments on *Walden Two*. They felt it did not recognize man's dignity. Man in *Walden Two*, according to these critics, "is placed on a par with pigeons."⁸ Initially, they felt the work was a satire on behavioral engineering. Later they saw the work not as satiric, but as messianic.⁹ Behavioral engineering was being offered as a benefit to man.

In 1954 Joseph Wood Krutch provided a further criticism of *Walden Two* in his book *The Measure of Man*. He expressed the overriding fear that the social sciences are destroying man's former belief in his own autonomy.¹⁰ In a chapter mainly concerned with *Walden Two* Krutch asked:

Is it not meaningful to say that whereas Plato's Republic and More's Utopia are noble absurdities, *Walden Two* is an ignoble one; that the first two ask men to be more than human, while the second urges them to be less?¹¹

Krutch argued that in *Walden II*, man's behavior is determined by the environment. Man's pride in himself is destroyed because credit and blame are meaningless. *Walden II* makes man more unthinking, more nearly automatic than he is now.¹² Behaving in a reasonable fashion has nothing to do with reasoning in *Walden II*. Like Williams, Krutch described the inhabitants of *Walden Two* as inmates of an institution, conditioned to like being conditioned.¹³ One of the more important concerns Krutch had about *Walden Two* is found in the following question: ". . . who is to decide in what direction the citizen is to be conditioned, and on the bases of what standards of value those decisions are to be made?"¹⁴

Andrew Hacker's article, published in the *Journal of Politics*

in 1955, entitled "Dostoevsky's Disciples," is directly related to *Walden Two* and the question of whether or not conditioners can remake society at will. Hacker described *Walden II* as a totalitarian society. He felt that the ruling elite failed to acknowledge any restrictions on the powers they might exercise over their subjects.¹⁵

Basically Hacker was concerned about the implications of conditioning. He made a distinction between being determined by anonymous forces, and being conditioned by planners. He contended that those determined by accidental forces can be called autonomous while those determined by planners may not. He stated: "For insofar as a person's mind contains attitudes which are the result of conditioning, so far is he lacking in autonomy."¹⁶ The conditioned were seen as infinitely malleable, passive receptors. He said that the characters in *Walden II* are not autonomous individuals.¹⁷

"The New Utopia" by Morris Viteles is a paper which contains the view that Skinner makes value judgments clothed in the language of the scientist. Further, Viteles warned that there is a danger when psychologists feel that their science makes them preeminent architects of the utopian way of life.¹⁸

It is worthwhile noting that Viteles was not particularly interested in the desirability or the practicality of *Walden II*. He simply used *Walden Two* as a tool or device to introduce a major issue, that issue being the relationship between value judgments and science. He used *Walden Two* as "a springboard for the discussion of a major issue in psychology."¹⁹

Carl Rogers explored this same value issue in a debate with Skinner published in 1956. Basically Rogers was concerned with the

relationship between values and science.²⁰ He stated his own position clearly:

Science has its meaning as the objective pursuit of a purpose which has been subjectively chosen by a person or persons. This purpose or value can never be investigated by the particular scientific experiment or investigation to which it has given birth and meaning. Consequently, any discussion of the control of human beings by the behavioral sciences must first and most deeply concern itself with the subjectively chosen purposes which such an application of science is intended to implement.²¹

Rogers accused Skinner of seriously underestimating the problem of power.²² He implicitly recognized power as the prerequisite of positive reinforcement and argued in effect, that the *Walden Two* program would either result in an unhealthy rigidity or in tyrannical control by a powerful elite. Referring to the second possibility, Rogers claimed that the vast majority of people would necessarily become the slaves of those individuals powerful enough to select the goals.²³

After stating that *Walden Two* and *Nineteen Eighty-Four* seem indistinguishable "at a deep philosophical level,"²⁴ Rogers continued his argument by suggesting an alternative set of values.²⁵ When he summarized the choice to be made between Skinner's values and his own, Rogers revealed the real source of conflict between himself and Skinner. He explained:

. . . But responsible personal choice, which is the most essential element in being a person, which is the core experience in psychotherapy, which exists prior to any scientific endeavor, is an equally prominent fact in our lives. To deny the experience of responsible choice is, to me, as restricted a view as to deny the possibility of a behavioral science.²⁶

Rogers did not like Skinner's call for a total revision of the concept of responsibility. Skinner, according to Rogers, fails to accept the fact that science is impossible without a personal choice of values.²⁷

In 1958 Mathew Israel published what he described as a summary of Skinner's work and thought in a few key areas, areas of significance to anyone concerned with understanding and improving mankind.²⁸ When he summarized the scientific view of man, Israel pointed out that man is not just a product of his environment. His original nature or genetic endowment determines in part, what he will become.²⁹ Israel also pointed out that *Walden Two* was only an imaginative guess at the kind of culture which might evolve if a science of behavior were used by men of good will to bring about a better life.³⁰ He claimed:

. . . The one fact we must face is that an effective science of behavior is already upon us. . . . Either men of good will must embrace it and use it for the good of the entire group, or else it will surely be grasped by evil men of selfish thought and tyrannical aspiration.³¹

Two more pieces of related literature were published in 1963, one by Spencer Klaw and the other by George Kateb. Klaw's article in *Harpers* is mainly about Skinner, but some interesting comments were made about *Walden Two* and its connection to Skinner's views. Klaw referred to Frazier when he said: ". . . much of the book's considerable liveliness is due to the fact that he is a skillfully drawn caricature of Skinner himself."³² Klaw compared life in *Walden II* to "the austere communism of many of the experimental communities of the nineteenth century."³³ He also stated: ". . . the productive, contented people who would make up Skinner's new society would be about as exciting as so many bowls of junket."³⁴ In addition he expressed the view that Skinner's account of the behavioral techniques used to engineer the happiness of *Walden II* is not detailed enough.³⁵

In *Utopia and Its Enemies*, George Kateb tried to show that both Skinner's views and the criticism that has been made of them are,

in certain important respects, deficient.³⁶ He argued that Skinner wants to reduce ethical training in *Walden II* to habituation³⁷ and that this viewpoint is the outstanding deficiency in Skinner's position.

In a paper published in 1965, Mary Jane McCue Aschner claimed:

. . . Skinner's actual deep regard for the unique worth, dignity, and rights of the human person was not communicated as clearly in *Walden Two* as it has been in his later writings. If some of Skinner's more quixotic critics had studied these later works, they might have found themselves bereft of windmills against which to tilt.³⁸

The central purpose of Aschner's article was to clarify Skinner's conception of the educated person.³⁹ In the end she raised some questions about Skinner's "self-controlling and self-determining"⁴⁰ planned man. She asked:

Is Skinner's system both logically and practically self-consistent? Are his means adequate to his avowed ends? To what extent does his bet -- that the society most likely to survive is one in which people are happy, healthy, secure, creative, and productive -- seem well placed?⁴¹

The related literature which has been reviewed so far does not exhaust the supply of critical literature directly related to *Walden Two*, but it does include the most important articles. It also provides the reader with a comprehensive view of the range of critical comment that has been made in response to *Walden Two*. Initial reactions were rather critical and unaccepting. Later reactions have become increasingly more supportive of the work. A very limited group have suggested that the issues raised in *Walden Two* may be more important than the details of Skinner's imaginative guess.

SKINNER'S NONFICTIONAL WRITING

Skinner has written several books, published numerous articles and has granted interviews which were subsequently published. His first book, *The Behavior of Organisms* was published in 1938 and is a report on his early research with animals. In the book Skinner made an important distinction between respondent and operant behavior. He also suggested that "the dynamic properties of operant behavior can be studied with a single reflex."⁴² The so called single reflex studied by Skinner at that time has since become known simply as an operant, a class of behavior which is emitted rather than elicited and which operates on the organism's environment. It is no longer referred to as an operant reflex.

The Behavior of Organisms is more than a report on Skinner's research, however. In 1938 Skinner was really asking, "What will be the structure of a science of behavior? and How valid can its laws be made?"⁴³ Although Skinner's terminology has been refined since he wrote *The Behavior of Organisms*, his present distaste for magical explanations is perfectly consistent with his 1938 position. In *The Behavior of Organisms* Skinner complained that the science of behavior "inherited a language so infused with metaphor and implication that it was frequently impossible merely to talk about behavior without raising the ghosts of dead systems."⁴⁴

Skinner's basic contention in *The Behavior of Organisms* was that a science of behavior must be firmly grounded on immediate observation. Scientific vocabulary must reject terms such as try, and use words such as walk. He wrote: "The sole criterion for the

rejection of a popular term is the implication of a system of a formulation extending beyond immediate observations."⁴⁵

Skinner's second book was written shortly after World War II to demonstrate the advantages of adopting non-aversive techniques of controlling human behavior. Published in 1948, *Walden Two* is a descriptive visitor's account of a supposedly ideal community. Professor Burris is the narrator of the story and describes how he and a number of friends arranged to visit an experimental ideal community. Burris describes his own impressions of the community and relates the verbal exchanges which took place during the visit, especially those between the protagonist Frazier and the visiting antagonist Castle. It is interesting to note that in this, the only fictional work published by Skinner, two of the main characters were given names closely related to his own.

In 1953 Skinner published his third book, *Science and Human Behavior*. He began the book by emphasizing the irresponsibility with which science and the products of science have been used. He asked if a science of human behavior might not be just what is needed to save man from himself, and suggested that order may eventually be achieved in the field of human affairs.⁴⁶ Skinner recognized that some people are afraid of order and he commented on the threat to freedom which a science of human behavior seems to imply. He indicated clearly that he thinks the threat is not to the freedom that man has; the threat is to the flattering conception of man's place in nature which is cherished by western cultures. *Science and Human Behavior*, as a whole, was an attempt to clarify the scientific conception of man as an alternative to this flattering traditional western conception of man as

a free agent.

Skinner ended *Science and Human Behavior* with a comment for those who despair at the thought of giving up the traditional conception of human nature:

. . . We may console ourselves with the reflection that science is, after all, a cumulative progress in knowledge which is due to man alone, and that the highest human dignity may be to accept the facts of human behavior regardless of their momentary implications.⁴⁷

In 1957 Skinner combined with C. B. Ferster to co-author a huge volume of highly technical work entitled *Schedules of Reinforcement*. The main bulk of the book is taken up with the presentation of a "series of experiments designed to evaluate the extent to which the organism's own behavior enters into the determination of its subsequent behavior."⁴⁸ Because the book is an exhaustive compilation of research involving the experimental manipulation of intermittent schedules of reinforcement it is not very relevant in a study of *Walden Two*. It does however, give the reader a refreshing insight into the complexity of Skinner's science of behavior.

Verbal Behavior is another highly complex book which is not particularly relevant in a study concerned primarily with *Walden Two*. As a technical, but speculative functional analysis of language, *Verbal Behavior* has little to contribute to the present study.

In 1959 Skinner published another book containing material relevant to this study. The book, *Cumulative Record*, is a collection of articles written by Skinner during the period from 1930 through 1958. The section entitled "The Implications of a Science of Behavior, Especially for the Concept of Freedom," is particularly significant because it contains three articles in which Skinner reacts

to Krutch, Rogers, and Hacker. Basically, he asked: ". . . with what special sort of wisdom is the non-scientist endowed?"⁴⁹ He also suggested that some of his critics are less than constructive when he claimed: "For if we continue to insist that science has nothing to offer but a new and more horrible tyranny, we may produce just such a result by allowing the strength of science to fall into the hands of despots."⁵⁰

The Analysis of Behavior is a programmed text written by Skinner and J. G. Holland. Published in 1961, it was designed to teach the basic terms and principles of the science of behavior.

In *The Technology of Teaching* published in 1968, Skinner described the advancing science of learning, and then turned to look at the present state of schoolroom teaching. He argued, in part, that education "must accept the fact that a sweeping revision of educational practices is possible and inevitable."⁵¹ Skinner equated teaching with, "the arrangement of contingencies of reinforcement,"⁵² and claimed that, ". . . as a mere reinforcing mechanism, the teacher is out of date."⁵³ A large part of *The Technology of Teaching* was devoted to defending teaching machines and programmed learning. Skinner argued that, "If the teacher is to take advantage of recent advances in the study of learning, she must have the help of mechanical devices."⁵⁴ He also roundly criticised the use of aversive techniques of control. *The Technology of Teaching* is particularly relevant to a study of *Walden Two* because it contains Skinner's thoughts on education in a nonfictional form.

Skinner's most recent book was published in 1969. Entitled

Contingencies of Reinforcement, the book is a collection of articles and lectures written by Skinner during the 1960's. In one of these articles Skinner commented on the violent criticism directed at *Walden Two*. He stated: "Possibly one explanation is that now, for the first time, the dream must be taken seriously. Utopias are science fiction, and we have learned that science fiction has a way of coming true."⁵⁵

In the same article, Skinner also took a brief look at some classical examples of utopian thought starting with Plato. After his brief, but critical, comments on the classics, Skinner argued, in part, that a utopian community should be "a pilot experiment, where principles are tested on a small scale to avoid the risk and inconvenience of size."⁵⁶ He suggested that the problems which arise in designing communities such as hospitals for psychotics, homes for retardates, training schools for delinquents, camps and standard classrooms, are not much different than the problems of designing a pilot utopian community.⁵⁷

Skinner further examined a common objection to *Walden Two* and concluded: "The man who insists upon judging a culture in terms of whether or not he likes it is the true immoralist."⁵⁸ Skinner claimed that such a person,

. . . is so completely the product of his own culture that he fears the influence of any other. He is like the child who said: "I'm glad I don't like broccoli because if I liked it, I'd eat a lot of it, and I hate it."⁵⁹

Contingencies of Reinforcement and the Cumulative Record

contain most of the articles which Skinner has published that are most clearly related to the topic of this research. Two important articles

exist however, that are not included in either of the books already reviewed. In an interesting article entitled "The Design of Cultures" Skinner considered the problem raised by Viteles and Rogers, the value question. Skinner claimed that, "The disputing of values is not only possible, it is interminable. To escape from it we must get outside the system."⁶⁰ He argued that value judgments are a form of guessing and that scientists have as much right, if not a greater right, to make guesses as the non-scientist.

In another interesting article simply entitled "Man" Skinner explored a number of questions about the traditional conception of man.⁶¹ Skinner's concern for concrete behavioral issues was evident when he stated:

If this traditional conception of man is to continue to challenge the scientific view, however, some thorny questions need to be answered. What is happening when a man refers to a standard of rightness? Can this form of behavior be analysed? Where do standards come from?⁶²

Skinner explained that in a world controlled by positive reinforcement, ". . . man would be either naturally wise and good or at least easily taught to be wise and good. There would be no place for intellectual and moral struggle."⁶³

Skinner concluded his paper with the thought that science does not change the nature of man.⁶⁴ If science leads people to see man in a different light, "he is nevertheless the same man we once saw in another light."⁶⁵ His final reply to his critics was unyielding. He claimed:

. . . The hard fact is that the culture which most readily acknowledges the validity of a scientific analysis is most likely to be successful in that competition between cultures which, will decide all such issues with finality.⁶⁶

Other nonfictional work by Skinner is available and relevant for the purposes of this investigation but it was not included in this review because it is somewhat repetative. The literature which was reviewed includes the most important books and articles written by Skinner. Some were found to be more important for the purposes of this study and others less so.

SUMMARY

Over the years Skinner has shown a consistent interest not only in promoting a science of behavior firmly grounded on immediate observation, but also in the implications of such a science for the management of human affairs. He believes that confusion in theory leads to confusion in practice and that adoption of a consistent point of view concerning the fundamental nature of human behavior will result in more effective solutions to the problems which continually challenge man's ability to survive.⁶⁷ *Walden Two*, *Science and Human Behavior*, and *The Technology of Teaching* are all concerned, each in their own way, with the implications of a science of human behavior for the management of human affairs. *Science and Human Behavior* and *The Technology of Teaching* are the most important sources of Skinner's nonfictional viewpoints on this topic and are therefore most relevant for the purposes of this study. Important articles are also to be found in *Cumulative Record*, *Contingencies of Reinforcement*, and elsewhere. Of those articles not found in the two books mentioned immediately above, the most important seem to be "The Design of Cultures," and "Man."

In his nonfictional work, Skinner tended to dismiss his critics

as somewhat less than constructive, perhaps justifiably so. His critics seemed, on the whole, to feel that the important question is whether or not human behavior ought to be controlled. Skinner seemed to consider the question irrelevant. He argued that human behavior is controlled, whether it ought to be or not, and that the important question is how it will be controlled and to what ends. His critics asked him the same question.

In "Freedom and the Control of Men," Skinner indicated for the reader what the major source of conflict is between himself and his critics: "What is being rejected, of course, is the scientific conception of man and his place in nature."⁶⁸ It is possible that *Science and Human Behavior* was written as a more scholarly presentation of his thoughts on the implications of a science of human behavior because *Walden Two* was misinterpreted. Noting that a scientific conception of human behavior dictates one practice and a philosophy of personal freedom another, Skinner commented: "We cannot really evaluate the issue until we understand the alternatives."⁶⁹ Perhaps he was thinking of the critics of *Walden Two*.

¹*Life Magazine*, June 28, 1948, p. 38.

²The form *Walden II* is used here and throughout the thesis to refer to the hypothetical community described in the book *Walden Two*.

³Donald C. Williams, "The Social Scientist As Philosopher And King," *Philosophical Review*, 58:349, 1949.

⁴Williams, op. cit., p. 346. ⁵Williams, op. cit., p. 356.

⁶Williams, op. cit., p. 358. ⁷Williams, loc. cit.

⁸Glen Negley and J. Max Patrick, *The Quest for Utopia* (New York: Henry Schuman, 1952), p. 590.

⁹Ibid.

¹⁰Joseph Wood Krutch, *The Measure of Man* (New York: Charter Books, 1962), p. 34.

¹¹Ibid., p. 59. ¹²Ibid. ¹³Ibid., p. 57. ¹⁴Ibid., p. 69.

¹⁵Andrew Hacker, "Dostoevsky's Disciples: Man and Sheep in Political Theory," *Journal of Politics*, 17:609, 1955.

¹⁶Ibid., p. 612. ¹⁷Ibid., p. 609.

¹⁸Morris S. Viteles, "The New Utopia," *Science*, 122:1168, December 16, 1955.

¹⁹Ibid.

²⁰Carl R. Rogers, "Some Issues Concerning the Control of Human Behavior," *Science*, 124:1061, November 30, 1956.

²¹Ibid., p. 1062. ²²Ibid., p. 1061. ²³Ibid., p. 1062.

²⁴Ibid. ²⁵Ibid., p. 1063. ²⁶Ibid., p. 1064. ²⁷Ibid.

²⁸Mathew L. Israel, "A Science of Behavior: Its Applications and Implications," *The Humanist*, 18:13, January-February, 1958.

²⁹Ibid., p. 21. ³⁰Ibid., p. 22. ³¹Ibid., p. 23.

³²Spencer Klaw, "Harvard's Skinner," *Harpers*, 226:48, April, 1963.

³³Ibid. ³⁴Ibid., p. 51. ³⁵Ibid., p. 49.

³⁶George Kateb, *Utopia and Its Enemies* (New York: Free Press of Glencoe, 1963), p. 142.

³⁷Ibid., pp. 160-1.

³⁸Mary Jane McCue Aschner, "The Planned Man: Skinner," *The Educated Man*, eds. P. Nash/ Kazamias/ Perkinson (New York: John Wiley & Sons, 1965), pp. 402-403.

³⁹Ibid., p. 403. ⁴⁰Ibid., p. 402. ⁴¹Ibid., p. 418.

⁴²B. F. Skinner, *The Behavior of Organisms* (New York: Appleton-Century-Crofts, 1938), p. 46.

⁴³Ibid., p. 5. ⁴⁴Ibid. ⁴⁵Ibid., p. 7.

⁴⁶B. F. Skinner, *Science and Human Behavior* (New York: Free Press, 1953), p. 5.

⁴⁷Ibid., p. 449.

⁴⁸C. B. Ferster and B. F. Skinner, *Schedules of Reinforcement* (New York: Appleton-Century-Crofts, 1957), p. 3.

⁴⁹B. F. Skinner, *Cumulative Record* (New York: Appleton-Century-Crofts, 1959), p. 5.

⁵⁰Ibid., p. 18.

⁵¹B. F. Skinner, *The Technology of Teaching* (New York: Appleton-Century-Crofts, 1968), p. 28.

⁵²Ibid., p. 5. ⁵³Ibid., p. 22. ⁵⁴Ibid.

⁵⁵B. F. Skinner, *Contingencies of Reinforcement* (New York: Appleton-Century-Crofts, 1969), p. 30.

⁵⁶Ibid., p. 38. ⁵⁷Ibid. ⁵⁸Ibid., p. 41. ⁵⁹Ibid., p. 42.

⁶⁰B. F. Skinner, "The Design of Cultures," *Daedalus*, 90:534-5, 1961.

⁶¹B. F. Skinner, "Man," *Proc. Amer. Philosophical Society*, 108:482, December, 1964.

⁶²Ibid., p. 483. ⁶³Ibid., p. 484. ⁶⁴Ibid., p. 485.

⁶⁵Ibid. ⁶⁶Ibid.

⁶⁷B. F. Skinner, *Science and Human Behavior* (New York: Free Press, 1953), p. 9.

⁶⁸B. F. Skinner, *Cumulative Record* (New York: Appleton-Century-Crofts, 1959), p. 7.

⁶⁹B. F. Skinner, *Science and Human Behavior* (New York: Free Press, 1953), p. 9.

Chapter 3

SOCIAL IMPROVEMENT

The main purpose of this investigation was to determine whether or not *Walden Two* provides the reader with accurate information about Skinner's views on subjects relevant to education. One of the more encompassing viewpoints contained in *Walden Two* concerns the nature of the Good Life and how it can be achieved. Together these topics constitute two aspects of one of the main aims of education, social improvement. The nature and the direction of all educational effort is influenced by considerations involving a conception of the Good Life and how it can be achieved. The conception of social improvement inherent in *Walden Two* is therefore of interest to educators in its own right, but ascertaining whether or not a leading educational psychologist agrees with and supports such a conception in his non-fictional work is even more interesting. If a scholar such as Skinner, with his vast knowledge of human behavior, truly believes the social improvement envisaged in *Walden Two* is possible, perhaps educators need to reconsider their own ideas on the subject. The purpose of the present chapter was to describe social improvement as found in *Walden Two*, and to provide any evidence available from Skinner's non-fictional work as to whether or not he agrees with the position described. This chapter was written in response to the following three questions:

1. What conception of the Good Life is embodied in *Walden Two*?

2. What procedure is recommended in *Walden Two* as a means of achieving the Good Life?

3. What evidence is there in Skinner's nonfictional work that indicates his agreement or disagreement with these positions?

By considering these three questions first, the writer was able to examine an educationally significant viewpoint which permeates the total work. This provided the opportunity of later examining more limited concerns within that framework.

THE GOOD LIFE

The ideal community depicted in *Walden Two* is dedicated first and foremost to the fulfillment of individual human needs and desires, to the self-realization of the individual within society. A good example of the emphasis placed on self-realization in *Walden II* can be seen in the fact that artistic expression of every kind is encouraged, including an "atrocious military band."¹ Individuals of widely varied abilities not only enjoy, but actively participate in artistic activities. Music, art, and literature are all conspicuously enjoyed and promoted in *Walden II*.

Another example of the importance of self-realization in *Walden II* is the emphasis placed on expanded interpersonal contact. The importance of such contact is particularly evident in the child-care practices of the community. In *Walden II* the family is completely replaced by the community. Parents may spend time with their own children but are encouraged to regard all children as their own. Similarly every child is encouraged to regard every adult as his

parent.² A child who has no mother or father "frequently receives presents and attentions from many adults and may find among them one or more for whom he will develop deep affection."³ Such a bond may be formed on the basis of common interests or similarity of character. In either case, it is the child's developing personality that is the key; "the artistically inclined will naturally be attracted to artists, the potential farmer will like to hang around the dairy."⁴ Later when the children grow up, they are not forced into jobs which do not suit their personalities, but instead can follow their own propensities or interests.

In emphasizing self-realization in Walden II, an attempt is made to increase the freedom of each individual. For instance, the citizens of Walden II possess, as a minimum, all the political rights and safeguards enjoyed by members of the larger American society. Further, the conditions of employment and the inconveniences of climate which definitely could curtail the opportunities and experiences of the individual are regulated within Walden II in order to remove as many of these restraining conditions as possible. For example, individuals are able to select their daily work assignments and they work only a few hours per day. Thus they are freed from the restraints imposed by unpleasant labor.

The housing arrangements and the overall living style of the members of Walden II are structured to further increase freedom by reducing the tyranny of weather. The buildings of the community are, for the most part, arranged so that members seldom have to go outdoors in bad weather. Requiring only a few hours of work of each member further reduces the tyranny of the weather because with little to do,

individuals can choose when to do it. For example, they may choose not to work outside when it is raining or too cold. The absence of any fixed schedules for eating also contributes to the flexibility which helps reduce the inconveniences of weather.

Freedom is further increased by eliminating all forms of aversive control. Members of Walden II are never restrained by such control, either psychological or physical. There are no police in the community and no punishment is ever administered. Frazier explains that aversive control does not work in the long run, not even with sheep.⁵

The reader may prefer to view the attempt to increase freedom in Walden II as an attempt to increase the availability of equally attractive alternatives. For instance, unpleasant jobs are made more preferable by reducing the number of hours one is required to work at them. To eliminate inconveniences of weather, activities uninfluenced by weather are always available as alternatives. Availability of equally preferable alternatives in work and in play thus tends to reduce the restraints associated with the one-and-only sentiment. This principle is considered just as true for choosing a mate as for choosing a profession.⁶

Not only is there thus an attempt in Walden II to increase individual freedom, there is also an attempt to free the whole community as much as possible from the restraints of tradition. Walden II is future oriented. The tea service, which is functionally designed and defended vigorously by Frazier, shows that even in small things the community remains flexible and forward-looking. Frazier comments:

"The main thing is, we encourage our people to view every habit and custom with an eye to possible improvement. A constantly experimental attitude toward everything -- that's all we need."⁷ The members believe that if the society is to survive, there can be no satisfaction with a static culture. They adopt an experimental attitude in an effort to maximize their ability to plan and to control their lives, and in so doing, believe that they are confirming human dignity. They collectively assert that, "There's no virtue in accident."⁸ By this they mean that only by attempting to control his own destiny can man have any dignity. Members of Walden II do not believe that those who reject any and all attempts to plan and control human behavior are being virtuous; they believe such people are avoiding the important questions of what kind of control should be utilized and for what purposes and that such people do not understand the true nature of human freedom.

One such character in *Walden Two* confuses planned and planning. He fails to recognize any distinction between the two and comments:

The behavior of your members is carefully shaped in advance by a plan, . . . , and it's shaped to perpetuate that plan. Intellectually Walden Two is quite as incapable of a spontaneous change of course as the life within a beehive.⁹

Frazier replies:

. . . In a sense, Walden Two is predetermined, but not as the behavior of a beehive is determined. Intelligence, no matter how much it may be shaped and extended by our educational system, will still function as intelligence.¹⁰

The important point to note here is that Walden II is an experimental community. The Planners and Managers do not possess perfect knowledge. Any plans they make must remain of necessity purely

tentative. As they gain new knowledge, they revise their plans. Walden II is a planning community, always preparing for the future. The fact that the people plan for the future in an attempt to control their own lives does not mean they lack freedom, it means exactly the opposite.

As a future oriented, planning society, Walden II is described as the freest place on earth and the community as a whole remains dedicated to the fulfillment of individual human needs and desires. Cooperation and positive reinforcement are encouraged as the best means of promoting such fulfillment. One result of this emphasis is that the usual profit motive is reversed in Walden II. For example, because human welfare is the primary value of the society, the baker, rather than trying to produce a loaf of bread with the fewest and cheapest materials, tries to get as much into a loaf as possible.¹¹

This same emphasis is evident in the political realm with the community organized and governed to promote the welfare of all members. Authorities regulate affairs according to the best interests of the people with due regard for their personal wishes and welfare. Planners base their decisions on what the people at large prefer. Public preferences are measured scientifically and misrepresentation by corrupt officials is eliminated. The official Planners have very little power to be corrupted by. They have no police and no slave labor, no guns and no bombs. They still manage however, to contribute a great deal to the success of Walden II. They make policies, review the work of the Managers, and have certain judicial functions.¹² They treat society as an on going experiment. Policies are hypotheses. If

the policies promote social harmony and equality, they are confirmed, if not, they are abandoned. The Planners keep an eye on the state of the nation in general and are eventually demoted to simple citizenship after ten years service. No special credit or prestige goes with the job but it involves added responsibilities. Furthermore, the Planners must meet their responsibilities without compelling anyone to do anything. They cannot use force to secure cooperation.

What the Planners can do, is adjust the amount of work required to obtain a labor-credit according to the needs of the community and according to the popularity of the job. Labor-credits are simply entries in a ledger but each member must earn twelve hundred credits per year. It averages about four credits per working day. By changing the number of hours of work required to earn a labor-credit for a certain type of job, the Planners are able to manipulate the preferences of the group for that kind of job. People who work at unpleasant jobs work for shorter periods of time. People who work at preferred jobs work longer hours. The outcome is manipulated by the Planners so that all kinds of work are equally desirable.¹³ The apparent outcome of this manipulation is that no one ever fails to earn the required twelve hundred credits.

This smoothly functioning political structure came into being through the cooperative efforts of intelligent, knowledgeable men, without any use of force. A small number of Planners gathered members and selected men of special training to be Managers. New board members were, and are, selected by the established board from names submitted by the Managers. New Managers are chosen by the board of

Planners according to their ability and training. They are not voted into office. Like the Planners, they have no power to compel anyone to do anything. They control only by considering the interests and welfare of individuals.

The importance of human welfare in the community is also evident in the fact that all individuals in Walden II are respected as worthy human beings. Women, for instance, are valued as individual personalities, not simply as cooks or scrub women. They are not considered inferior beings and equality of the sexes is accepted as a fact in Walden II. Women serve the community in many capacities including taking their places as Planners.¹⁴

This principle of respect for all can also be seen in the attempt by the community to eliminate all signs of personal aggrandizement. Honorific titles such as Doctor are not used, hero worship is discouraged, and seniority is never discussed. Generalized gratitude is encouraged in place of such personal aggrandizement. Frazier explains: "We overflow with gratitude --but to no one in particular."¹⁵ The following comment clarifies the connection between respect for all and gratitude for all. Speaking of the majority of people who do not want to plan, Frazier comments: "I don't see why you view them with contempt. They are the backbone of a community -- solid, trustworthy, essential."¹⁶ In other words the generalized gratitude is a symptom of generalized respect.

Walden II then, is a community of happy, future oriented people living a life of abundance and harmony. They are healthy, free of unwanted work, actively engaged in exercising their talents and

abilities in an atmosphere conducive to satisfying personal contacts, and they enjoy their leisure because they are free to satisfy their needs. The community is administered by highly trained specialists capable of determining the will of the people. Children are raised and educated by the community as a whole under the guidance of the specialists. A variety of equally attractive alternatives in work and in play increases the freedom of the members and facilitates self-realization of the individual.

ACHIEVING THE GOOD LIFE

The procedure recommended in *Walden Two* for achieving the Good Life described above is the procedure advocated by Frazier and accepted by Burris. Education and evolution are presented as the keys for transforming society. In the process of arguing for his conception of change, the founder of Walden II rejects religion, revolution, and democratic politics as possible successful methods for achieving the Good Life. He dismisses political reformers as pathetic figures and believes that a revolutionist is just a special kind of political reformer. He comments: "I dare say we ought to admire David as he goes forth to meet Goliath, but the pathetic thing is -- he wants to be Goliath."¹⁷ In other words, revolutionists, and other political reformers, do not abandon power and punishment, they simply assert that if they are allowed to wield power their way, people will be happier. It is because revolutionists do not abandon power and punishment that Frazier rejects revolution. He repeats over and over again, in one way or another, that, "You can't *enforce* happiness,"¹⁸ and that,

". . . the only effective technique of control is unselfish!"¹⁹ He does not see power as a means of achieving the Good Life.

There is a distinction to be made however, between maintaining control and gaining control. At one point while discussing the failings of communism in Russia following the 1917 Revolution, Frazier comments:

. . . You may argue that the seizure of power was a temporary expedient, since the people who held it were intolerant and oppressive. But you can hardly defend the continued use of power in that way.²⁰

He seems to imply that the use of force to gain control might be acceptable under certain circumstances if more enlightened methods were then instituted to maintain control. At the same time he characterizes the weaknesses which developed in the Russian system as inevitable. He states: "They were inevitable just because the attempt was made at the level of power politics."²¹ In other words, revolution is not the way to achieve the Good Life. It must always fail.

Frazier's position on religion as a way to transform society is just as clear as his position on revolution. He is quite blunt about saying Walden II is not a religious community.

. . . We don't give our children any religious training, Our conception of man is not taken from theology but from a scientific examination of man himself. And we recognize no revealed truths about good or evil or the laws or codes of a successful society.²²

When commenting on the failure of previous utopian experiments, Frazier suggests that their failure was probably due to reliance on revealed truth. His attitude starts to show when he asks, "What more can you ask for as an explanation of failure?"²³ Frazier's attitude becomes even more apparent when he claims, ". . . the religious

practices which our members brought to *Walden Two* have fallen away little by little, like drinking and smoking."²⁴ In other words, religious faith is just one more palliative which becomes irrelevant "when the fears which nourish it are allayed."²⁵

Some of the practices of organized religion are borrowed by the community members however. Brief readings and lessons are used chiefly because the members like the effect on the speech of the community.²⁶ When clergymen from neighboring towns attend one of the services in *Walden II*, the reading is from the Bible instead of Confucius. Frazier describes the purpose of this practice as, "fighting bigotry."²⁷ The implication is that church authorities are generally intolerant and are incapable of accepting practices which differ from their own.

Not only are religious authorities criticized in *Walden Two* but the whole practice of religion is criticized. This is evident when Frazier's comments on the subject are considered. When he says, "We don't ask to be consoled for a vale of tears by promises of heaven,"²⁸ he makes it pretty clear that he has no use for religion as a way of achieving the Good Life. For Frazier, religion seems to be designed to help people accept a poor life, rather than to stimulate them to achieve a good life.

There is no indication that Burris agrees with Frazier's estimate of religious means, but there is also no indication that he does not agree. At any rate, the overall impression created in *Walden Two* is that religion is not a viable means of achieving the Good Life, at least not here on earth.

Political action is also rejected in *Walden Two*. Frazier states quite bluntly: "That's the first plank in the Walden Two platform. You can't make progress toward the Good Life by political action!"²⁹ On a less strident note, he rejects present government techniques when he claims: "A Golden Age, whether of art or music or science or peace or plenty, is out of reach of our economic and governmental techniques."³⁰

According to Frazier, the problem with governments is that they lack a suitable body of scientific knowledge of human behavior. They still rely on force and therefore, "are based on bad principles of human engineering."³¹

Frazier accepts democracy as a better form of government than the despotic forms defeated in World War II. He does not however, accept democracy in its present form as the best kind of government possible. He claims: "It isn't, and it can't be, the best form of government, because it's based on a scientifically invalid conception of man."³²

Frazier is very critical of present democratic procedures. He is especially critical of voting practices. He declares: "In the world at large we seldom vote for a principle or a given state of affairs. We vote for a man"³³ Having done so, the citizens must depend on that man's wisdom and benevolence.³⁴ Frazier claims: "Voting is a device for blaming conditions on the people. The people aren't rulers, they're scapegoats."³⁵ He argues that when the voting is done, the government may or may not represent a majority of the people and that even if the elected government does represent a

majority of the people, a democracy may still be despotic.³⁶ He is concerned about minority groups and complains; "But in a democracy, the majority solve the problem to their satisfaction, and the minority can be damned."³⁷ While Frazier recognizes and deplores the despotic possibilities of majority rule, he is nevertheless quite prepared to use it temporarily. He says: "As soon as we're in the majority in any locality, we shall exercise our rights under a democratic form of government and take control."³⁸

Presumably, a new order would be instituted after the election and public opinion would be polled scientifically. Individuals would then be able to vote directly for a principle or state of affairs. There is no indication in *Walden Two* what principles are employed to settle differences of opinion which are revealed through such polling techniques, however differences which do arise are apparently always settled amicably. Coersion is never used to force a minority to conform.

Revolution, religion, and present democratic political procedures are rejected in *Walden Two*. The community members are represented by Frazier, the founder of the community. Although small seeds of doubt about Frazier's position might remain, he seems to reject all methods except education and evolution combined. Burris accepts Frazier's arguments and finally becomes a member of the community. Castle fumes and fusses about the lack of freedom in *Walden II*, and abhors the methods suggested by Frazier. His arguments are not very impressive however, perhaps by design. At any rate, the overall impression created in *Walden Two*, is that education and

evolution together constitute the key to the Good Life.

Education in *Walden Two* however, is not the education of traditional school systems. In *Walden II*, the community as a whole is responsible for education which begins at birth and continues throughout life. It is, in fact, a strictly planned and controlled socialization process.

It seems that the scientific knowledge of human behavior available to the Planners in *Walden II* guarantees the successful socialization of all members. Apparently there is no problem of nonconformity that would necessitate the extremes of shunning, ostracism, or punishment. Cooperative personalities are the happy result of planned and strictly controlled socialization in *Walden II*.

Such a happy result does not seem very consistent with Frazier's pessimistic premise that, "each of us, . . . , is engaged in a pitched battle with the rest of mankind."³⁹ Taking a realistic view of society, Frazier explains: "Each of us has interests which conflict with the interests of everybody else. That's our original sin, and it can't be helped."⁴⁰ The members of *Walden II* deal with this problem by emphasizing the importance of teaching self-control.

Because conflicts of interests cannot be eliminated, techniques of self-control are taught in *Walden II* through a series of adversities designed to "build a tolerance for annoying experiences."⁴¹ In extreme cases of frustration, resentment towards things in general remains socially acceptable because it can be more easily controlled.⁴²

In a metaphorical passage, Frazier suggests that the usual

well-intentioned efforts of professors, politicians, and writers, are worse than useless.

. . . Our civilization is running away like a frightened horse, her flanks flashing with sweat, her nostrils breathing a frothy mist; and as she runs, her speed and panic increase together. As for your politicians, your professors, your writers -- let them wave their arms and shout wildly as they will. They can't bring the frantic beast under control.⁴³

Waving your arms frantically or shouting wildly is no way to stop a frightened horse. Frazier considers the inappropriateness of the usual attempts to improve society to be an ironic fact.

His answer is to concentrate on the children: "Let her run till she drops from exhaustion, Meanwhile let's see what we can do with her lovely colt."⁴⁴

Now consider the emphasis on evolution in *Walden Two*. Near the end of the book Burris realizes that more than educational techniques are needed to bring about the creation of an improved society. He declares: "But I also saw that educators themselves could not save the situation. The causes were too deep, too remote. They involved the whole structure of society."⁴⁵

Frazier cautions Burris, and the reader, when he says: "The final social structure we're working toward must wait for those who have had a full *Walden Two* heritage."⁴⁶ That is the point. In the beginning, the community existed only on paper. It came into being due to the work of a small number of Planners who gathered members and selected men of special training to be Managers. The members concentrated on rearing their children according to scientific principles. The community as a whole adopted, and still maintains, an experimental approach to life. They base their government upon a science of human

behavior.⁴⁷ They must face the danger of being destroyed however, and to protect themselves, they are organized legally as a corporation and conduct a vigorous public relations campaign.⁴⁸ Sudden widespread interest and attempts to convert the general population would be disastrous, so the members try to control the rate at which the idea is spread.⁴⁹ Consequently the original members will "pass on to a well deserved oblivion -- the pots that were marred in the making."⁵⁰ In other words, progress will be achieved generation by generation. Only children reared in a community like *Walden II* will be able to take "the last step in the long evolution of government."⁵¹ Only they will be able to "employ unselfish motives where personal domination has always seemed ideally suited even if always fatal."⁵²

In *Walden Two* then, it is argued that one way to achieve the Good Life is to set up a small subcultural community within the tolerant atmosphere of the larger democratic society of North America. If such a community relies on education and persuasion to control its members, survival will bring about the eventual dominance of the new culture.

THE NONFICTIONAL VIEW

In *Contingencies of Reinforcement*, Skinner gave his unambiguous blessing to life as lived in his improved community. He said:

Walden Two describes an imaginary community of about a thousand people who are living a Good Life. They enjoy a pleasant rural setting and work only a few hours a day, without being compelled to do so. Their children are cared for and educated by specialists with due regard for the lives they are going to lead. Food is good and sanitation and medical care excellent. There is plenty of leisure and many ways of enjoying it. Art, music, and literature flourish, and scientific research is encouraged. Life in *Walden Two* is not only good, it seems feasible.⁵³

In another source Skinner asked: "What is wrong with it?"⁵⁴

He surmised that the apparent ability of the Planners to control and manipulate the behavior of members of Walden II was what spoiled the vision for many critics who subsequently attacked the book. He reaffirmed his support of practices described in *Walden Two* when he commented:

. . . Fear of control, . . . , has led to misinterpretation of valid practices and the blind rejection of intelligent planning for a better way of life. . . . in conquering this fear we shall become more mature and better organized and shall, thus, more fully actualize ourselves as human beings.⁵⁵

In other words, through intelligent planning man can control his own destiny. He can shape his own social institutions to facilitate self-realization. In another article Skinner clarified the degree to which he considers such intelligent planning to be instinctive. He echoed an argument from *Walden Two* when he said: "The coordinated activities of the anthill or beehive operate on very different principles from those of a family, a large company, or a great city."⁵⁶

Thus, Skinner believes that man can, and must, plan for the future. Man must maintain an experimental attitude and utilize the facts and techniques of science to study human behavior. Skinner wants men of good will to use their knowledge to bring about a better world, and he is not afraid to advocate the control of human behavior. In *Science and Human Behavior* he claimed: "To refuse to accept control, . . . , is merely to leave control in other hands."⁵⁷ Perhaps like Frazier, he was thinking of the bully, the cheat, the educator, the priest, and the others who already exercise control. At any rate, Skinner feels that a distinction has to be made between different

kinds of control.

Skinner was saddened to hear Carl Rogers compare *Walden Two* to *Nineteen Eighty-Four* and argued that the two books are completely different because the kinds of control employed in each are so different. The control exerted in *Nineteen Eighty-Four* is viciously aversive, but in *Walden Two* no-one exerts any kind of personal current control. In response to criticisms suggesting that the control which is exerted in *Walden II* is a new and more subtle form of tyranny, Skinner pointed out that *Walden Two* was essentially an attempt to picture a society that functions for the benefit of the individual members without ever having to resort to punishment.⁵⁸ He further emphasized the importance and value of individuality when he said:

. . . Let the individual be free to adjust himself to more rewarding features of the world about him. In the end, let his teachers and counselors "wither away," like the Marxist state. I not only agree with this as a useful ideal, I have constructed a fanciful world to demonstrate its advantages.⁵⁹

It is not easy however, to keep track of what Skinner means when he speaks thus of an individual being free. At one point he claimed that: "A scientific analysis of human behavior . . . cannot make individual freedom the goal of cultural design."⁶⁰ Elsewhere he stated: "Science does not set the group or the state above the individual or vice versa."⁶¹ He seems to think that the state is an organized collection of individuals and that cultures are therefore not free either; "they are created by individual action and survive only through the behavior of individuals."⁶² What Skinner denied then, was not the importance or the value of individuality. In effect he only claimed, as did Frazier, that in a certain sense the individual cannot be free. Further he claimed that, "Science is not free,

either."⁶³ Scientists cannot become self-appointed governors by stepping outside the stream of history and taking the evolution of government into their own hands.⁶⁴ They cannot destroy man's individuality even if they want to. Skinner claimed that as the product of a set of genetic and environmental variables, "man is most reassuringly unique."⁶⁵ That Skinner finds such a fact reassuring reinforces the idea that he values individuality. He wants the State, as a collection of individuals, to be happy and forward looking.

Skinner does not equate happiness with simple abundance or with the principle of *to each according to his needs*. He argued that this principle must be balanced by the principle of *from each according to his ability*.⁶⁶ He wants a productive culture and he argued as follows: "Mere abundance, providing for each according to his needs, leads to inaction. . . . Idleness does not provide for the support of a culture, and it does not make for happiness."⁶⁷ He claimed that *sad* is related to the word *sated* and commented: "We do not need to be economic reactionaries to worry about non-productivity, nor cynics to view mere gratification with contempt."⁶⁸ He claimed that only when pleasures such as food, sex, music, and so on, have an energizing effect on our behavior do they really make us happy.⁶⁹ He suggested that better use should be made of these reinforcers through effective contingencies of reinforcement in order to make men active, happy, and forward-looking. He claimed: "In doing so, we supplement the wise personal rule of Plato's Republic, the appeal to reason and law in More and Bacon, and particularly the economic sanctions of Adam Smith and Karl Marx."⁷⁰

In a conversation with R. I. Evans, Skinner claimed that a utopian community such as Walden II is possible, but he did not comment on the probability of its survival. He said:

. . . It should be possible for a group of well-meaning people to get together and organize their lives, cutting down some of the things they normally consume to eliminate some of the aversive labors otherwise required; to organize their social environment so that they make more contacts of a satisfactory nature; to organize a school system which educates their children effectively for the life they are going to lead; to organize an economic system so that work can at least be done under pleasant circumstances; and so on.⁷¹

Thus the Good Life must be instituted cooperatively in the interests of the individuals involved. Skinner's nonfictional writing is consistently critical of force and exploitation. He does not think aversive control is a scientifically valid method of attempting to achieve a better way of life. He argues that alternative methods of control should be tested in a small experimental community. Such a community would be a simplification in the sense that the risks and inconveniences of size would be avoided. Skinner said such a utopia, as a pilot project, is feasible, but he also said: "In the long run, of course, we must dispense with utopian simplifications, for the real test of a culture is the world at large."⁷² Whether or not such a community would survive is an experimental question for Skinner.

In his nonfictional work then, Skinner argued that human beings can create their own Good Life. They can make themselves happy, skilful, well behaved, and productive by adopting an experimental attitude towards life, by planning intelligently for the future, and by adopting non-aversive methods of controlling human behavior. With strength and good will on the same side,⁷³ contin-

gencies of reinforcement can be more effectively arranged to promote individual human happiness and welfare, at least within a small experimental community. Skinner, in effect, described *Walden Two* when he commented on utopian thinking:

. . . It has scrutinized the sources of social practices, examined their consequences, and proposed alternatives which should have more desirable consequences -- and all in the experimental spirit characteristic of science.⁷⁴

SUMMARY

In this chapter the Good Life of Walden II was described as featuring an abundance of freedom, harmony, mutual self-respect, and other necessities of life such as food, clothing, and friends. The people living this Good Life were pictured as being healthy, active, productive, and future oriented. It was pointed out that these people are governed by benevolent highly trained experts who are held responsible for determining scientifically how best to facilitate the fulfillment of individual human needs and desires without sacrificing the future of the community. Punishment cannot be used in the Good Life of Walden II so government was assumed to be by consent only. People living the Good Life were described as placing a high value on individuality and diversity as aspects of cultural strength, rather than on conformity or regimentation.

Direct statements about the Good Life of Walden II were taken from Skinner's nonfictional work and provided as evidence that Skinner does strongly support the position summarized above. It was pointed out that he believes the only thing his critics can find wrong with the Good Life described, is that it was planned. Evidence was presented

indicating that Skinner discounts this criticism and believes not only that man can and must plan for the future, but that in doing so he may realize his highest state of dignity. Further evidence was presented indicating that Skinner does value individuality and freedom.

Nothing was presented which would contradict any aspect of the Good Life described because nothing which would do so was found in the nonfictional literature.

The procedure recommended in *Walden Two* for instituting the Good Life was also described in this chapter. It was pointed out that revolution, religion, and present democratic politics are rejected as effective means of realizing social improvement. Some question remains about the value of democratic politics. Frazier was presented as arguing that the Good Life cannot be voted in or forced in by legislation, but he was also described as being quite prepared to use the despotic possibilities of majority rule to seize power and take control. The true key to instituting the Good Life was described as education and evolution. If a small experimental community were set up cooperatively and relied on education and persuasion to control its members, it might, through an evolutionary process, eventually become the dominant culture. The cooperative efforts of knowledgeable well-intentioned men were pictured as the necessary preconditions for beginning such an evolutionary process.

Evidence was provided from the nonfictional work which indicates that Skinner believes a small utopian community is possible as a pilot project but nothing was presented which would indicate he believes such a utopian community would actually survive

and become the dominant culture. Some evidence was provided which suggests that Skinner considers the question purely hypothetical. No evidence was presented that would indicate Skinner believes it is necessary to share dining and toilet facilities as is done in *Walden II*, if the Good Life is to be realized, but no evidence was presented to indicate that he does not believe such arrangements are necessary.

¹B. F. Skinner, *Walden Two* (New York: Macmillan Co., 1948), p. 90.

²*Ibid.*, p. 142. ³*Ibid.*, p. 143. ⁴*Ibid.*, p. 145.

⁵*Ibid.*, p. 301. ⁶*Ibid.*, p. 54. ⁷*Ibid.*, pp. 29-30.

⁸*Ibid.*, p. 292. ⁹*Ibid.*, p. 253. ¹⁰*Ibid.*, p. 254.

¹¹*Ibid.*, p. 47. ¹²*Ibid.*, p. 54. ¹³*Ibid.*, p. 52.

¹⁴*Ibid.*, p. 54, see also p. 133. ¹⁵*Ibid.*, p. 170.

¹⁶*Ibid.*, p. 167. ¹⁷*Ibid.*, p. 195.

¹⁸*Ibid.*, p. 162, italics in the original. ¹⁹*Ibid.*, p. 289.

²⁰*Ibid.*, p. 276. ²¹*Ibid.*, pp. 274-5. ²²*Ibid.*, pp. 198-9.

²³*Ibid.*, p. 157. ²⁴*Ibid.*, p. 199. ²⁵*Ibid.* ²⁶*Ibid.*

²⁷*Ibid.*, p. 200. ²⁸*Ibid.* ²⁹*Ibid.*, p. 193.

³⁰*Ibid.*, p. 89. ³¹*Ibid.*, p. 194. ³²*Ibid.*, p. 273.

³³*Ibid.*, p. 236. ³⁴*Ibid.* ³⁵*Ibid.*, p. 266.

³⁶*Ibid.*, p. 272. ³⁷*Ibid.*, p. 269. ³⁸*Ibid.*, p. 231.

³⁹*Ibid.*, p. 104. ⁴⁰*Ibid.* ⁴¹*Ibid.*, p. 107.

⁴²*Ibid.*, p. 110. ⁴³*Ibid.*, p. 89. ⁴⁴*Ibid.*, p. 90.

⁴⁵*Ibid.*, p. 312. ⁴⁶*Ibid.*, p. 250. ⁴⁷*Ibid.*, p. 195.

⁴⁸*Ibid.*, p. 198. ⁴⁹*Ibid.*, p. 228. ⁵⁰*Ibid.*, p. 250.

⁵¹Ibid., p. 240. ⁵²Ibid.

⁵³B. F. Skinner, *Contingencies of Reinforcement* (New York: Appleton-Century-Crofts, 1969), p. 29.

⁵⁴B. F. Skinner, "Some Issues Concerning the Control of Human Behavior," *Cumulative Record* (New York: Appleton-Century-Crofts, 1959), p. 31.

⁵⁵Ibid., p. 36.

⁵⁶B. F. Skinner, "The Design of Cultures," *Daedalus*, 90:538, 1961.

⁵⁷B. F. Skinner, *Science and Human Behavior* (New York: Free Press, 1953), p. 439.

⁵⁸B. F. Skinner, "Some Issues Concerning the Control of Human Behavior," *Cumulative Record* (New York: Appleton-Century-Crofts, 1959), p. 30.

⁵⁹Ibid., p. 35.

⁶⁰B. F. Skinner, *Contingencies of Reinforcement* (New York: Appleton-Century-Crofts, 1969), p. 48.

⁶¹B. F. Skinner, *Science and Human Behavior* (New York: Free Press, 1953), p. 448.

⁶²Ibid. ⁶³Ibid., p. 446. ⁶⁴Ibid.

⁶⁵B. F. Skinner, "Man," *Proc. Amer. Philosophical Society*, 108:485, December, 1964.

⁶⁶B. F. Skinner, *Contingencies of Reinforcement* (New York: Appleton-Century-Crofts, 1969), p. 34.

⁶⁷B. F. Skinner, "Utopia and Human Behavior," *Humanist*, 27:122, July/August, 1967.

⁶⁸Ibid. ⁶⁹Ibid. ⁷⁰Ibid., pp. 122 and 136.

⁷¹R. I. Evans, *B. F. Skinner* (New York: E. P. Dutton & Co., 1968), pp. 46-7.

⁷²B. F. Skinner, *Contingencies of Reinforcement* (New York: Appleton-Century-Crofts, 1969), p. 47.

⁷³B. F. Skinner, "Freedom and the Control of Men," *Cumulative Record* (New York: Appleton-Century-Crofts, 1959), p. 17.

⁷⁴B. F. Skinner, *Contingencies of Reinforcement* (New York: Appleton-Century-Crofts, 1969), p. 47.

Chapter 4

HUMAN NATURE AND THE CONTROL OF MAN

In Chapter Three it was pointed out, among other things, that *Walden Two* was written to picture the advantages of a society without punishment. The book was described basically as recommending non-aversive control of human behavior. It was found that this recommendation is strongly supported in Skinner's nonfictional work.

In as much as the conception of social improvement which is embodied in *Walden Two*, is based on certain assumptions about human nature and the control of man, it seemed necessary to examine this particular topic in greater detail. Further, the relationship between human nature and the control of man is an important consideration for educators. Education in general is dedicated to social improvement, and teaching in particular is concerned with controlling and shaping human behavior. Clarifying whether or not Skinner agrees with the assumptions made in *Walden Two* about human nature and its relationship to the control of human behavior seemed to be a worthy undertaking.

In the current chapter, the basic problem of the thesis was approached by describing important aspects of the *Walden Two* conception of man and his behavior, and by reviewing what Skinner said in *Science and Human Behavior* on the same topic. *Science and Human Behavior*, written some years after *Walden Two*, was used because it is considered a more academic discussion of topics considered

in the earlier work.¹ The present chapter was written in response to the following two questions:

1. What does Frazier, as spokesman for the Walden II community, say about human nature and the control of man?

2. Is there any evidence in *Science and Human Behavior* to indicate that Skinner agrees or disagrees with Frazier's position?

By considering these two questions, the writer was able to examine an important educational concern before examining more specific arguments concerning education.

MAN IN WALDEN TWO

In *Walden Two* man's behavior is determined. No capacity for capricious or spontaneous action is assumed. Man cannot choose to ignore his environment. As spokesman for the *Walden Two* conception of man, Frazier argues that human beings are subtly but inexorably controlled by the reinforcing qualities of their environment. Behavior which results in a pleasing or satisfying environmental situation for an individual is likely to be repeated, and individuals exhibit behavior which has been reinforced in the past. Therefore, if it is possible to control a person's environment, it is possible to control his behavior. Frazier explains:

. . . if it's in our power to create any of the situations which a person likes or to remove any situation he doesn't like, we can control his behavior. When he behaves as we want him to behave, we simply create a situation he likes, or remove one he doesn't like. As a result, the probability that he will behave that way again goes up²

If foolish or socially undesirable behavior results in a situation an individual likes, the probability that similar foolish or

undesirable behavior will re-occur increases. Similarly, if wise or socially desirable behavior is reinforced, the probability of such behavior in the future is increased. Frazier claims therefore, that ". . . men are made good or bad and wise or foolish by the environment in which they grow."³

The determinism of *Walden Two* however, is not simply environmental. Frazier explains further:

. . . In a sense, *Walden Two* is predetermined, but not as the behavior of a beehive is determined. Intelligence, no matter how much it may be shaped and extended by our educational system, will still function as intelligence.⁴

For anyone to exercise the tremendous power of positive reinforcement it is necessary to conceive of the human being as having *likes* or preferences, even when first born. Every human being must begin life possessing an *original nature* or genetic endowment and part of the supposedly scientifically valid conception of man which is inherent in *Walden Two*, is the original nature, or intelligence, which will continue to function no matter how much it is shaped. The only way positive reinforcement can work, is if there is a self, an organism with existing preferences, available to like an environmental situation. In other words, the determinism of *Walden Two* is also self-determinism. An organism which is not hungry cannot be controlled by providing it with food. Children will only work for Planners if they are personally interested in the rewards contingent upon the effort. Frazier is no more able to resolve the problem of determinism and free will than anybody else. Man's behavior in *Walden Two* is determined by environmental reinforcement, yet his own nature determines what is reinforcing. Thus Frazier denies the

existence of freedom and at the same time claims that *Walden II* is the freest place on earth.⁵ He dismisses the problem philosophically as a pseudo-question of linguistic origin.⁶

All questions of freedom aside, man in *Walden Two* is a being that cannot be effectively controlled by punishment. He can be forced to behave, but he cannot be forced to enjoy behaving.⁷ Punishment does not reduce the probability that an individual will misbehave in any given way.⁸ Man is not a creature incapable of revolt. He is exactly the opposite. He is a self-determining creature that is sure to revolt if his environment does not please him. He will revolt in spite of punishment as soon as an opportune moment presents itself. Frazier points out that in an unjust society rebellion is to be expected. He explains: "Nothing short of an insurmountable fence or frequent punishment will control the exploited."⁹

In other words, punishment cannot be used to produce the cooperative behavior which is so necessary in a strong and just society although it may be used for purposes of exploitation. When punishment is used to control people for such purposes, behavior of a revolutionary nature is to be expected. This is so because man has an *original nature* which cannot be changed. But Frazier sometimes seems to contradict this position. He is an extremist, and some of the things he says seem to suggest that he thinks human nature can be shaped at will. For example, he asks: "Suppose you suddenly found it possible to control the behavior of men as you wished. What would you do?"¹⁰

At another point in the story he says, "Give me the specifications, and I'll give you the man!"¹¹ Such statements suggest that

human nature is limitlessly plastic but it is possible to think of them as enthusiastic exaggerations. When Burris suggests that Frazier seems to have unbounded faith in human nature,¹² Frazier replies more reasonably:

I have none at all, . . . , if you mean that men are naturally good or naturally prepared to get along with each other. We have no truck with philosophies of innate goodness -- or evil But we do have faith in our power to change human behavior.¹³

The statement quoted above simply asserts that man is not good or evil irrespective of environmental circumstances, and that human behavior can be influenced by such circumstances. It is the typical social scientist's contention that man possesses the potential for good or evil. The statement does not indicate to what extent Frazier thinks behavior can be shaped.

Frazier's criticism of propaganda however, suggests that he does not believe man is limitlessly plastic. He complains: "We should ruin our whole experiment if we overdoctrinated You can't propagandize and experiment at the same time."¹⁴ His criticism of indoctrination and propaganda is based on the idea that "Walden Two must be *naturally* satisfying."¹⁵ Walden II is, after all, an experimental community designed to discover what is essentially satisfying to human beings. This position of course implies a nature to be satisfied but does not suggest what that nature entails. Engineering of attitudes in Walden II is to some extent possible but would conceal important symptoms about what man really *likes*.¹⁶

Frazier admits that the potency of a technology of human behavior can scarcely be overestimated and that it is powerful enough to make man happy under many conditions of life.¹⁷ He does not sug-

gest however, that societies which seem to violate every human instinct can be made to last.¹⁸ He only says, "We might make such a society last many years."¹⁹

Frazier, moreover, does not suggest that man can be made happy under any conditions, only under many conditions. He complains about what he considers faulty cultures:

. . . in order to make such a culture acceptable it's necessary to suppress some of the most powerful human emotions and motives. Intellect is stultified or diverted into hypnotic meditations, ritualistic incantations, et cetera. The basic needs are sublimated. False needs are created to absorb the energies.²⁰

Frazier makes a distinction then, between basic needs and false needs. He recognizes powerful human emotions. He also believes that the surest way to guarantee the failure of an experimental community is to indoctrinate and to create false needs.²¹ When Frazier says that you can't force a man to be happy, he not only means you cannot make a man happy by twisting his arm, he also means that what makes man happy is, in a sense, beyond the reach of manipulation. Therefore, a culture that is not naturally satisfying, is a culture that will not survive.

When Castle accuses Frazier of flying in the face of strong natural forces in *Walden II*, because of the child care practices, Frazier asks, "What do we really know about the nature of the parental relation?"²² Such a question is not incompatible with his recognition of basic needs. It is one thing to believe that there is such a thing as human nature and quite another to know what it is. Frazier does not think human nature is limitlessly plastic but he definitely denies that anyone knows what the limits are. His position is clearer in the following quote:

. . . What is the 'original nature of man'? . . . what are the basic psychological characteristics of human behavior -- the inherited characteristics, if any, and the possibilities of modifying them and creating others? That's certainly an experimental question -- for a science of behavior to answer.²³

Frazier does not deny the existence of human nature; he simply suggests that little is really known about it. He agrees completely with Rogers, another character in *Walden Two*, who says: "We want to find out what people really want, what they need in order to be happy, and how they can get it without stealing it from somebody else."²⁴

It is clear then, that Frazier does not think human nature can be changed. Man's genetically determined preferences cannot be altered. He does, however, think that human behavior can be more effectively controlled. He argues that effective control of human behavior is necessarily unselfish, and that it should therefore not be feared. He argues further that the power of conditioners is limited if they use positive reinforcement as their control technique. Individuals controlling through positive reinforcement are not likely to become tyrants. He uses himself as an example and tells Burris how he was driven, in his early experimental days, by a frenzied, selfish desire to dominate. He recalls the rage he felt when a prediction failed:

. . . I could have shouted at the subjects of my experiments, 'Behave, damn you! Behave as you ought!' Eventually I realized that the subjects were always right. They always behaved as they should have behaved. It was I who was wrong.²⁵

In other words, if anyone might be tempted to abuse power, it would be Frazier. But Frazier made an important discovery. He laughs at himself when he tells Burris, "And what a strange discovery for a

would be tyrant, . . . , that the only effective technique of control is unselfish!"²⁶

In another mood, Frazier baits Castle by claiming that once a person grasps the principle of positive reinforcement he "can enjoy a sense of unlimited power."²⁷ He further goads Castle by exclaiming in self-satisfaction; "It's enough to satisfy the thirstiest tyrant."²⁸ Frazier quickly qualifies his position however and says: "But it's a limited sort of despotism And I don't think anyone should worry about it. The despot must wield his power for the good of others."²⁹

Such remarks show that Frazier thinks a Planner has a special kind of power which can only be used for the good of the community and which, therefore, represents no real threat. The conditioners are not likely to become tyrants.

Frazier tries to make the same point when Castle reminds him that an elite is a fascist device. Frazier does not deny that the Planners and Managers have a sort of power that common members cannot have. He admits that they have power:

. . . Temporarily, they have power, in the sense that they run things --but it's limited. They can't compel anyone to obey, for example. A manager must make a job desirable. He has no slave labor at his command, for our members choose their own work. His power is scarcely worthy of the name.³⁰

According to Frazier, the only way Planners or conditioners can make their subjects behave, is to use positive reinforcement. Force or punishment is self-defeating. Besides, the Managers have no machinery of that kind, no police, no guns, no army. "In order to extend their power," claims Frazier, "they would have to provide more and more satisfying conditions."³¹ They know this.

By taking this position Frazier places a great deal of faith

in the idea that knowledge dictates action. The only reason Frazier is not a tyrant is because he knows aversive methods of control are ineffective in the long run. He admits that punishment is temporarily effective but claims to *know* that it eventually leads to failure. He also claims that all members of Walden II, including the Planners, work because they are smart enough to *know* a leisure class would eventually destroy the community.³² In both cases cited, Frazier expresses the hopeful belief that knowledge of long term results will influence the actions of the Planners. It will keep them from acting in a way which would harm the community. At the same time, Frazier admits that in the past men have ignored long term community advantages in favour of short term personal gains. When pushed by Castle, Frazier admits the possibility of despotism and says that cultures which work for the advantage of a few last a long time.³³ As an example he asks Castle to "look at India, where the oppressed aren't even aware that they are sick and miserable."³⁴ He does not however, suggest that the despotism of India was instituted through positive reinforcement as a controlling technique. Frazier discounts any similar eventuality as improbable in Walden II not only because his Planners use non-aversive techniques of control but also because they know "that any usurpation of power would weaken the community as a whole and eventually destroy the whole venture."³⁵

When Burris still suggests that a group of men might be willing to sacrifice the community, Frazier does not deny the possibility. He replies that such an implausible event would be a catastrophe much like an earthquake or devastating epidemic.³⁶ Frazier assumes that knowledge is virtue and that such a catastrophe is more

likely to be avoided if man can use the methods of science to discover more about human nature and effective ways of controlling behavior.

For Frazier, the only possible way to discover more about what man really wants, what he needs in order to be happy, and how he can realize his ambitions, without destructive violence, is to develop a genuine experimental science of behavior. He argues that if man is to survive, he must analyse human behavior scientifically. He claims:

. . . There's work to be done, if we're to survive. To stand still would be to perish. The discrepancy between man's technical power and the wisdom with which he uses it has grown conspicuously wider year by year. . . . It's no solution to put the brakes on science until man's wisdom and responsibility catch up. . . . We need a powerful science of behavior.³⁷

But he says a technology of behavior is impossible if man is free in the sense that he is not controlled by his environment. According to Frazier, "You can't have a science about a subject matter which hops capriciously about."³⁸ You cannot have a science about a subject matter which is not lawfully related to external, observable environmental variables. The scientific conception of man cannot accept the idea that human behavior is not determined. If man is to survive, he must predict and control his own behavior, and he cannot do that unless he adopts a new and scientifically valid conception of human nature. Burris reaches the same conclusion and says: "What was needed was a new conception of man, compatible with our scientific knowledge, which would lead to a philosophy of education bearing some relation to educational practices."³⁹

In *Walden Two* then, Frazier argues that man is an environmentally controlled, self-determining organism. His behavior is fully determined and lawfully related to external environmental variables.

Further, man is bound to revolt if his environment does not please him. His cooperative behavior is best obtained through non-aversive techniques of control, but if he is to be exploited, unrelenting punishment must be employed. In such a situation, revolutionary behavior is to be expected at the first opportune moment. Thus, because of human nature, punishment is not an effective means of controlling behavior in a just society. Frazier argues that the methods of science must be used to discover more effective ways of controlling human behavior if a just society is ever to be realized.

MAN IN SCIENCE AND HUMAN BEHAVIOR

In *Science and Human Behavior* Skinner argued that a technology of human behavior is needed to save man from himself. First he emphasized the irresponsibility with which science and the products of science have been used. In essence, he echoed Frazier's line:

. . . Man's power appears to have increased out of all proportion to his wisdom. He has never been in a better position to build a healthy, happy, and productive world; yet things have perhaps never been so black. . . . Dreams of progress toward a higher civilization have been shattered by the spectacle of the murder of millions of innocent people. The worst may be still to come.⁴⁰

Skinner, like Frazier, does not think science should be abandoned because it has increased man's destructive powers without increasing his wisdom. His comment is typically Frazerian:

. . . There is no virtue in ignorance for its own sake. Unfortunately we cannot stand still: to bring scientific research to an end now would mean a return to famine and pestilence and the exhausting labors of a slave culture.⁴¹

Skinner's solution is to apply the methods of science to human affairs. He referred to the success which has already been accom-

plished in this field when he said, "It is possible that science has come to the rescue and that order will eventually be achieved in the field of human affairs."⁴²

Like Frazier, Skinner also claimed that, "If we are to enjoy the advantages of science in the field of human affairs, we must be prepared to adopt the working model of behavior to which a science will inevitably lead."⁴³

The working model referred to, is seen by Skinner as opposed to the traditional western conception of the free agent, "whose behavior is the product, . . . of spontaneous inner changes of course."⁴⁴ Like Frazier, Skinner rejected the traditional conception of human nature because it is not compatible with the science of behavior. He commented almost in Frazier's exact words: "We cannot apply the methods of science to a subject matter which is assumed to move about capriciously."⁴⁵

For Skinner the issue is not merely academic. He commented: "A scientific conception of human behavior dictates one practice, a philosophy of personal freedom another."⁴⁶ The point of view Skinner accepts, insists upon recognizing coercive forces in human conduct.⁴⁷ A scientifically valid conception of human nature must assume that behavior is lawful and determined.⁴⁸

Skinner did not say in *Science and Human Behavior* however, that behavior is determined simply by the environment. He argued that it can be *analysed* as determined by the environment. When criticising inner causes or explanations Skinner commented: "The practice of looking inside the organism for an explanation of behavior has tended to obscure the variables which are immediately available for a

scientific analysis."⁴⁹

In the functional analysis advocated by Skinner, the physically observable behavior of the individual organism is the dependent variable and the physical external conditions which affect the organism are the independent variables. Inner states are real but are not relevant. Valid information about inner states may throw light upon the lawful relationship between behavior and external observable conditions, "but can in no way alter it."⁵⁰

In other words, Skinner does not claim that man's behavior is determined simply by his environment. He only claimed that, *given an organism*, behavior can be *analysed* as determined by the environment. It can be explained as a function of environmental variables. Such an explanation does not deny the organism an original nature.

Skinner, like Frazier, realizes that reinforcement must begin with an original nature. Whether or not a particular environmental situation will increase or decrease the probability of any particular operant depends as much on the organism as on the environment. Skinner does not dwell on this aspect of determinism because it is not manipulable and probably because he considers it obvious. He commented:

There are, of course, extensive differences between individuals in the events which prove to be reinforcing. The differences between species are so great as scarcely to arouse interest; obviously what is reinforcing to a horse need not be reinforcing to a dog or man.⁵¹

Man is for Skinner, as he is for Frazier, a completely determined being: a self-determining organism controlled by his environment. Skinner does not generally deal with the genetically given original nature because it cannot be manipulated. He explained:

. . . The most that can be said is that the knowledge of the genetic factor may enable us to make better use of other causes. If we know that an individual has certain inherent limitations, we may use our techniques of control more intelligently, but we cannot alter the genetic factor.⁵²

It should be noted however, that in saying Skinner recognizes the importance of the self as a factor in determinism, the suggestion is not being made that Skinner accepts self-determination as implying capriciousness or an inner ability to ignore environmental variables.⁵³ He does not.

There is then, almost a perfect parallel between Frazier's argument in *Walden Two* and Skinner's position in *Science and Human Behavior*. The parallel however, is not complete. Skinner was very cautious in *Science and Human Behavior* when he discussed punishment. Instead of dismissing punishment as an ineffective means of controlling behavior, he explained that a suspicion has arisen that punishment is ineffective. He claimed: "An immediate effect in reducing a tendency to behave is clear enough, but this may be misleading. The reduction in strength may not be permanent."⁵⁴

Skinner also does not agree fully with Frazier about the dangers inherent in the power of positive reinforcement. He agrees with Frazier that it is possible that a few men might misuse power, but he does not agree that it is implausible. Skinner sees a very real danger in the new powers available for the manipulation of behavior. His statements about the danger are much stronger than Frazier's.

When discussing the dangers of new techniques of control with R. I. Evans, Skinner made his personal position clear in no uncertain terms. He declared: "I think a science of behavior is just as

dangerous as the atom bomb. It has the potential of being horribly misused."⁵⁵

It should be noted that in saying a science of behavior has the potential of being horribly misused, Skinner was not saying that human nature can be changed. He agrees fully with Frazier that scientific knowledge of human behavior will not change human nature. He claimed:

. . . Physics does not change the nature of the world it studies, and no science of behavior can change the essential nature of man, even though both sciences yield technologies with a vast power to manipulate their subject matters.⁵⁶

He was even more blunt when he told Evans that, ". . . no analysis changes man; he is what he is."⁵⁷

SUMMARY

In this chapter Frazier's conception of human nature and its relationship to human behavior was described. It was argued that Frazier conceives of man as a self-determining environmentally controlled organism which cannot be effectively controlled by punishment. For Frazier, man is not only capable of revolting, he is sure to revolt under certain circumstances. Frazier does not conceive of man as limitlessly plastic. Far from denying the existence of human nature, Frazier argues that human nature cannot be changed. He does however maintain that human behavior, as distinct from human nature, can be more effectively controlled. Frazier was described as asserting that effective control of human behavior in a just society must be unselfish, and that such control need not be greatly feared. Frazier was further described as believing that knowledge dictates action and that, if man is to survive, an experimental science of behavior must

be used to gain more knowledge about human nature and its relationship to human behavior.

In the second part of this chapter, evidence was presented to indicate that Skinner agrees with Frazier that a science of human behavior is needed if order is ever to be realized in human affairs. Further evidence was provided to show that Skinner, like Frazier, rejects the traditional conception of man uncontrolled by his environment. In further reviewing Skinner's position in *Science and Human Behavior*, it was pointed out that Skinner only argues man's behavior can be *analysed* as determined by the environment, and that he too conceives of man as, at least in part, self-determining. Evidence was provided indicating that he recognizes the role of the genetic factor in determinism and it was concluded that for Skinner, as well as Frazier, man is a self-determining environmentally controlled creature.

Some evidence was also provided indicating that Skinner, in his recent nonfictional work, is much more cautious when discussing the shortcomings of punishment and the dangers inherent in the power of positive reinforcement.

Finally, some evidence was presented to indicate that like Frazier, Skinner does not think a science of human behavior can change human nature.

¹Mary Jane McCue Aschner, "The Planned Man: Skinner," *The Educated Man*, eds. P. Nash/ Kazamias/ Perkinson (New York: John Wiley & Sons, 1965), p. 388.

²Burrhus F. Skinner, *Walden Two* (New York: Macmillan Co., 1948), p. 259.

³Ibid., p. 273. ⁴Ibid., p. 254. ⁵Ibid., p. 263.

⁶Ibid., p. 297. ⁷Ibid., p. 162 and 194. ⁸Ibid., p. 260.

⁹Ibid., p. 302. ¹⁰Ibid., p. 255. ¹¹Ibid., p. 292.

¹²Ibid., p. 196. ¹³Ibid. ¹⁴Ibid., p. 210. ¹⁵Ibid.

¹⁶Ibid. ¹⁷Ibid., pp. 207-209. ¹⁸Ibid., p. 207.

¹⁹Ibid. ²⁰Ibid., pp. 208-209. ²¹Ibid., pp. 207-208.

²²Ibid., p. 144. ²³Ibid., p. 175. ²⁴Ibid., p. 8.

²⁵Ibid., p. 289. ²⁶Ibid. ²⁷Ibid., p. 264. ²⁸Ibid.

²⁹Ibid. ³⁰Ibid., p. 233. ³¹Ibid., p. 272. ³²Ibid., p. 57.

³³Ibid., p. 271. ³⁴Ibid. ³⁵Ibid. ³⁶Ibid.

³⁷Ibid., pp. 290-291. ³⁸Ibid., p. 257. ³⁹Ibid., p. 312.

⁴⁰Burrhus F. Skinner, *Science and Human Behavior* (New York: Free Press, 1953), p. 4.

⁴¹Ibid., p. 5. ⁴²Ibid. ⁴³Ibid., p. 6. ⁴⁴Ibid., p. 7.

⁴⁵Ibid., p. 6. ⁴⁶Ibid., p. 9. ⁴⁷Ibid., p. 7.

⁴⁸Ibid., p. 6. ⁴⁹Ibid., p. 31. ⁵⁰Ibid., p. 35.

⁵¹Ibid., p. 75. ⁵²Ibid., p. 26. ⁵³Ibid., p. 20.

⁵⁴Ibid., p. 183.

⁵⁵Richard I. Evans, *B. F. Skinner* (New York: E. P. Dutton & Co., 1968), p. 54.

⁵⁶Burrhus F. Skinner, "Man," *Proc. Amer. Philosophical Society*, 108:485, December, 1964.

⁵⁷Richard I. Evans, op. cit., p. 107.

Chapter 5

EDUCATION

The basic problem of this thesis was approached in the current chapter by describing the nature of education as it is found in *Walden Two* and by reviewing some of the relevant statements made by Skinner in *The Technology of Teaching* on the same topic.

The Technology of Teaching was used as a source of Skinner's non-fictional writing because it deals most specifically with education. This chapter was written then, in response to the following two questions:

1. What is the nature of education as it is presented in *Walden Two*?
2. Is there any evidence in *The Technology of Teaching* that Skinner agrees or disagrees with this conception of education?

EDUCATION AS FOUND IN WALDEN TWO

Education is presented in *Walden Two* as an institutional process with little relationship between its philosophy and its practices. It is presented as a social system which can be improved a great deal. *Walden Two* contains a sustained criticism of what Frazier refers to as traditional education.¹ He thinks of it as part of a miserable system of control which should be completely revised. The

necessary changes would begin with a new conception of man and would end in the complete revision of a culture. Burris finally agrees, and when he looks back on his experiences at Walden II, he concludes: "But to achieve this, education would have to abandon the technical limitations which it . . . imposed upon itself and step forth into a broader sphere of human engineering."²

This position can be explicated by considering four basic limitations of so called traditional education as presented in *Walden Two*. First, such education is based on the principle of selection; second, it concentrates on the wrong age group; third, it relies on aversive techniques of control; and fourth, it is not designed to handle individual differences. The implicit suggestion is of course, that education can be improved: first, by more deliberate control of educational experiences; second, by expanding to include new age groups; third, by using positive reinforcement as a control technique; and fourth, by recognizing and dealing with individual differences.

For Frazier, the first limitation listed above is intimately connected with lack of control. He abhors the lack of control which he thinks characterizes customary educational practices. He claims: "Traditional practices are admittedly better than nothing, But the whole system rests upon the wasteful principle of selection."³ In other words, Frazier believes that much of what teachers now do in the name of education is accidental. They do not teach so much as they select. They select those who somehow manage to learn in spite of the system. He complains about the usual haphazard experiences a child is left to face:

. . . In most cultures the child meets up with annoyances and reverses of uncontrolled magnitude. Some are imposed in the name of discipline by persons in authority. . . . Others are merely accidental. No one cares to, or is able to prevent them.⁴

Frazier goes on to suggest that an educational system based on the principle of selection can be compared to the old-fashioned family system which was based on the big-litter philosophy. This system solved the problem of survival by encouraging large families in the absence of good child care practices. Both systems waste valuable human resources. In the case of education by selection, a few hardy individuals survive but many others become losers in life. Frazier lists brave men and cowards, optimists and pessimists, contented men and discontented men, even loved and unloved men as the "extreme products of a miserable system."⁵

Whether or not Frazier is correct when he claims this system is based on the principle of selection, is not an issue to be settled at this point. It is important however, to understand that he does think traditional educational practices actually amount to little more than accidental selection. Consequently, he compares such practices with the practices in Walden II and states: "The traditional use of adversity is to select the strong. We control adversity to build strength."⁶ In Walden II, instead of distresses of accidental magnitude, the children are deliberately subjected to a series of controlled adversities. Potentially frustrating experiences are introduced according to special schedules designed to develop each child's capacity to exercise self-control.

The apparent implication of Frazier's criticism of education by selection is that present practices can be improved through

rigorous scientific control of educational experiences. Thus the education in Walden II consists of deliberately designed and controlled experiences. Frazier states: "There's no virtue in accident. Let us control the lives of our children and see what we can make of them."⁷ He does not want to settle for the few who survive customary practices.

But if education is to be much more than selection it must start at birth. The second limitation of the traditional education described by Frazier is that it concentrates on the wrong age group. According to the members of Walden II, the years from birth to approximately six are the most important years in a child's development. They believe that besides learning a great deal about the world around him, a young child also acquires the techniques of self-control which allow him to function as a productive and cooperative member of society. Frazier argues that by the time children enter the traditional school system their most important educational years have been lost in the harried atmosphere of the typical household. He complains:

. . . The control of behavior is an intricate science, into which the average mother could not be initiated without years of training. . . . Even when the mother knows the right thing to do, she often can't do it in a household which is busy with other affairs. Home is not the place to raise children.⁸

Things are done differently in Walden II where child care is supervised by experts and where the educational institution is the community. Frazier claims proudly that in Walden II, "all our ethical training is completed by the age of six."⁹ Adult members of Walden II begin at once to exercise the strict control which is necessary if educational experiences are ever to serve a greater goal than selection. Punishment however is never used in these early

experiences. Frazier considers the use of aversive control in education to be the third limitation which the traditional system must overcome if it is to realize its full potential.

It should be understood that *aversive control* includes the use of punishment to eliminate undesirable behavior, and the use of threats to promote desirable behavior. As was pointed out in Chapter Four, aversive control is not used in Walden II because it is considered ineffective. Even severe punishment is described as ineffective in the long run. Frazier comments on the effect of severe punishment when it is used in an attempt to eliminate an individual's socially undesirable behavior: "That's the pity of it. If he doesn't repeat it in our presence, he will in the presence of someone else. Or it will be repeated in the disguise of a neurotic symptom."¹⁰ Punishment does not alter potential behavior and it sometimes, perhaps often, simply creates social cripples who cannot function successfully in society.

Frazier does not enlarge upon his objection to the use of threats to promote desirable behavior. He only suggests that such methods are unnecessary. He does so by commenting on the educational practices of Walden II. He states confidently: "We don't need to create motives. We avoid . . . the escape from threat so widely used in our civil institutions."¹¹ His basic recommendation is simply to preserve and build on worthwhile and productive motives. He explains the Walden II practice:

. . . We appeal to the curiosity which is characteristic of the unrestrained child, as well as the alert and inquiring adult. We appeal to that drive to control the environment which makes a baby continue to crumple a piece of noisy paper and the scientist continue to press forward with his predictive analysis of nature.¹²

If the motives of the unhampered child can be preserved by fortifying against discouragement, then threats of punishment are not needed to make children study.

The fourth limitation of the traditional education system described by Frazier is its failure to provide individualized instruction. The present school system is not organized to facilitate such instruction. Frazier describes the flexibility of the educational system in Walden II by way of comparison:

. . . Here the child advances as rapidly as he likes in any field. No time is wasted in forcing him to participate in, or be bored by, activities he has outgrown. And the backward child can be handled more efficiently too.¹³

In Walden II, children are not locked into a standardized grade system with a fixed curriculum that everyone must work through. They are only taught the techniques of learning and thinking.¹⁴ Frazier does not expand or clarify what these techniques are, but he does emphasize that in Walden II bright children are neither bored nor spoiled, and dull children are neither frustrated nor humiliated. Further, administrative machinery is not allowed to violate principles of child development. For example, no child is ever forced into a learning situation before he is ready for it.

Thus Frazier develops four basic criticisms of traditional practices and highlights four important aspects of education in Walden II. The educational system of Walden II stresses carefully controlled experiences designed to build strength of character, persistence, and self-control, instead of selecting those few who acquire these characteristics in spite of the system. Members of Walden II believe the first six years of life are the most important

and formative years in a child's life. Educational experiences are designed to take advantage of this fact but techniques of control remain non-aversive. Only the techniques of learning, thinking, and self-control are taught, and supervision is withdrawn as rapidly as self-control is acquired. By about the age of thirteen, the children are ready to enjoy adult privileges.¹⁵ Education does not stop however. It continues as part of the life of the community. Frazier states proudly: "We teach anatomy in the slaughterhouse, botony in the field, chemistry in the medical building and in the kitchen and dairy laboratory."¹⁶ In this way he implies that once children have acquired self-control and techniques of learning, real-life situations provide the best educational experiences, and that therefore, education in Walden II can be described as a continuous controlled process which begins at birth and continues throughout life. It is a continuous development of individual talents and abilities and as such, it has its own value or none at all.¹⁷

Although there is no lengthy commentary in the novel on the value of education, there is no doubt that it is considered valuable. There is also no doubt that the aims of education are considered beyond debate, and that the only important questions remaining are experimental questions concerning efficient methods of attaining the aims.

In Walden II, educational effort is directed towards the production of, "The most alert and active group-intelligence yet to appear on the face of the earth."¹⁸ The people of Walden II want a strong survival oriented culture. Flexibility and diversity are seen

as critical factors in the struggle for survival, and members of the community are all encouraged to "view every habit and custom with an eye to possible improvement."¹⁹ The members of the community want to promote cultural survival by developing the abilities and talents of every person in the community to the fullest possible extent. They know that to survive, Walden II must be able to expand in competition with other cultures.²⁰ They also know that to do this they must not only be progressive, but also strong. They believe that education should develop cultural strength by maximizing the development of each of its citizens. No conflict is seen between individuality and citizenship. As far as the members of Walden II are concerned, there is no such thing as an independent individual. Everybody is engaged in a pitched battle with society but, like it or not, society always wins. Frazier comments: "Many prevail against one, and men against a baby. Society attacks early, when the individual is helpless. It enslaves him almost before he has tasted freedom."²¹

In other words, society is omnipotent, and people are only capable of self-realization as citizens. Thus, in Walden II, intelligence is kept on the right track, "for the good of society rather than of the intelligent individual -- or for the eventual rather than the immediate good of the individual."²² It is kept on the right track by carefully planned and controlled educational experiences designed to develop happy and productive citizens.

If education is to be successful in Walden II then it must produce an active and alert group-intelligence by developing to their full, the talents and capacities of every individual in the society, and in so doing produce a strong future oriented culture. Three intermediary

tasks must be accomplished if this main aim of education is to be attained. These tasks can also be thought of as goals which have to be realized as the means of achieving the main aim of education. As such they are ends in themselves.

First, the curiosity and motivational state characteristic of children must be protected and preserved; second, the techniques of learning and thinking must be taught; and third, the techniques of self-control must be taught.

The members of Walden II see learning as a continuous life-long process. They argue that education, therefore, should also be desirable and life-long. To preserve the desire to study and improve oneself it is necessary to preserve the motivation which is present in young children. Frazier complains: "No one asks how to motivate a baby. . . . And this tendency doesn't die out, its *wiped* out."²³ Frazier explains that in Walden II this motivation is preserved by fortifying against discouragement. Discouragement is introduced in carefully controlled doses on carefully controlled schedules. He compares the system to inoculation against diseases.²⁴

One of the results of the successful preservation of the desire to study and learn, is a reduction in the number of subjects that need to be taught. If motivation is not destroyed by a system of aversive control, children will learn by themselves. All they need is the opportunity. Frazier comments euphorically: "Give them a chance, that's all. Leisure. Opportunity. Appreciation."²⁵ In other words, let each child develop as he will. Do not frustrate the untalented by forcing them to study that which is beyond them or uninteresting to them. And do not hold back the gifted "by organized mediocrity."²⁶

At the same time, the members of Walden II recognize that their children will eventually experience, "the 'heartache and the thousand natural shocks that flesh is heir to.'"²⁷ It is therefore very necessary to teach the techniques of self-control. Contrary to some critical opinion, the aim of education in Walden II is not to produce a society of standardized and regimented pavlovian dogs.²⁸ It is aimed instead, at producing individuals capable of designing their own good conduct.

The adult members of Walden II know their children will eventually have to face the adversities of life. They also know that it is impossible to foresee all future circumstances and that it is therefore impossible to know what conduct will be required in the future. For these reasons they argue that, ". . . you have to set up certain behavioral processes which will lead the individual to design his own 'good' conduct when the time comes."²⁹ A series of adversities are designed and used to build strength of character in the children of Walden II. It is done carefully and deliberately, "in order to prepare for adversities which are beyond control."³⁰

Thus the members of Walden II concentrate on preserving motivation, on teaching the techniques of learning and thinking, and on teaching techniques of self-control. They do so as part of an overall educational scheme designed to create a strong and healthy culture. Traditional practices are improved upon in four areas. Educational experiences are more carefully designed and controlled. Children are subjected to such experiences earlier in life before their most important formative years are lost in the confusion of harried house-

holds. Punishment is never used. Individual differences are fully recognized and accepted. Instruction is fully individualized.

In *Walden Two*, education is presented as a social institution with practices unnecessarily limited by tradition. It is presented as a process that is out of date, but one which can be modified in certain respects to give it a greater potential for social improvement. In *Walden Two* it is not the aims of education which are questioned, it is the methods or the practices. Commenting on some worthy aims, Burris claims: "It was obvious that no one, . . . , had any notion of how to set out to attain them."³¹ *Walden Two* suggests that man is learning how to arrange better educational experiences, and that he can learn more through the scientific analysis of behavior. It does not however, provide specific recipes for producing any particular kinds of behavior. It provides very general indications of how educational practices should be changed, but few details.

EDUCATION IN THE TECHNOLOGY OF TEACHING

In *The Technology of Teaching* Skinner did not discuss what the aims of education should be. This may be because he thinks the question is irrelevant. He seems more concerned with what he calls educational policy, and with how it can be changed. Like the inhabitants of *Walden II*, Skinner seems to assume that society knows what the aims of education should be, and that the real problem is to change present policy accordingly. The assumptions about educational aims which underlie Skinner's discussion of educational policy in *The Technology of Teaching* are the same assumptions made by Frazier and the other members of *Walden II*.

Skinner stated clearly: "Ideally a system of education should maximize the chances that the culture will not only cope with its problems but steadily increase its capacity to do so."³² After discussing the possible unwise uses of a technology of teaching, Skinner described what such a technology should and could do:

. . . it could maximize the genetic endowment of each student; it could make him as skillful, competent, and informed as possible; it could build the greatest diversity of interests; it could lead him to make the greatest possible contribution to the survival and development of his culture.³³

Skinner argued that the accidental diversity of our present educational system is not good enough. Planned diversity is needed.³⁴ Like the members of Walden II, Skinner emphasized again and again, the connection between cultural strength and diversity. He claimed, ". . . a policy designed to maximize the strength of a culture must encourage novelty and diversity."³⁵

Skinner also devoted a great deal of time to discussing the importance and problems of teaching the techniques of learning and thinking and the techniques of self-control. A full chapter was also devoted to the problem of motivation.

When discussing motivation, Skinner showed a distinctly Frazerian dislike of aversive control. He pointed out that: ". . . a student who learns to behave in given ways under aversive control may stop behaving as soon as the aversive control ceases, no matter how appropriate . . . the behavior may be."³⁶

Skinner claimed that one of the ultimate advantages of an education which is based on aversive techniques is simply coming to the end of it.³⁷ Skinner's answer to the motivation problem was to get

rid of aversive techniques of control and to design better contingencies of reinforcement using the reinforcers already available.³⁸ By stretching schedules of reinforcement, and teaching self-management of motivation, the desire to study and to improve oneself can be preserved. He commented:

. . . Through a proper understanding of contingencies of reinforcement, we should be able to make students eager and diligent and be reasonably sure that they will continue to enjoy the things we teach them for the rest of their lives.³⁹

Skinner put forward another argument in *The Technology of Teaching* which is very similar to one found in *Walden Two*. In his chapter on "Teaching Thinking", Skinner claimed that, "If thinking can be analysed and taught separately, the already-known can be transmitted with maximal efficiency."⁴⁰ After devoting some time to analysing various forms of behavior commonly associated with thinking, Skinner reached the following conclusion which is typically Frazerian:

Instructional contingencies are usually contrived and should always be temporary. If instruction is to have any point, the behavior it generates will be taken over and maintained by contingencies in the world at large. The better the teacher, the more important it is that he free the student from the need for instructional help.⁴¹

The third intermediate task of education as found in *Walden Two* is the teaching of self-control. It too was emphasized by Skinner in *The Technology of Teaching*. Skinner seemed to be paraphrasing Frazier when he stated:

The ethical problems to be met by an individual cannot of course all be foreseen, and the culture may need to teach a kind of ethical problem solving which permits the individual to arrive at his own precepts as occasion demands.⁴²

In other words, the aims of education assumed in *The Technology of Teaching* are the same aims which are found in *Walden Two*. They are,

cultural survival through flexibility and diversity, and cultural strength through maximization of individual talents and abilities. Even the intermediate aims of education are the same. Preserve motivation. Teach techniques of learning and thinking. Teach techniques of self-control. In *The Technology of Teaching* Skinner included one additional intermediate aim. Creativity! This however, is perfectly consistent with the Walden II desire to view all things with an eye to improvement.

In *The Technology of Teaching*, Skinner not only presented a position similar to the *Walden Two* position on the aims of education; he also adopted a very Frazerian attitude towards traditional practices. They are presented, as they are in *Walden Two*, as outmoded and badly in need of revision. He stated: ". . . the advances which have recently been made in our control of the learning process suggest a thorough revision of classroom practices"⁴³ He did not argue however, that the necessary changes would amount to the complete revision of a culture. He argued that they would involve teaching machines and programmed instruction. He stated clearly that machine instruction can be expected to affect several traditional practices.⁴⁴

Skinner's criticism of the traditional practices most likely to be affected was very similar to Frazier's. A faint echo of Frazier's criticism of education by selection was detected when Skinner commented: "In the disguise of teaching thinking we set different and confusing situations and claim credit for the students who deal with them successfully."⁴⁵ The similarity between Skinner's objection and Frazier's criticism was more obvious when Skinner continued:

The trouble with deliberately making education difficult . . . is (1) that we must remain content with the students thus selected, even though we know that they are only a small part of the potential supply of thinkers,⁴⁶

Skinner further reasserted Frazier's call for controlled experiences deliberately designed to facilitate learning when he complained: "But holding a student responsible for assigned material is not teaching even though it is a large part of modern school and university practice."⁴⁷

Skinner also recognized the importance of the early childhood years as educational years, but he did not develop the topic to any great extent. A faint echo of Frazier's position was evident when Skinner commented about the advantages of teaching machines:

. . . If devices of this sort were generally available in nursery schools and kindergartens, children would be far more skillful in dealing with their environments. All young children are now "disadvantaged" in this respect.⁴⁸

Although the emphasis on teaching machines is different, the concern for young children is not. In the quote above, Skinner indicated, as Frazier does, that deliberately designed educational experiences should be provided during a child's most formative years.

Although he did not expand on the importance of a child's early formative years, Skinner did comment extensively in *The Technology of Teaching* about aversive techniques of control, and about the importance of individual differences. He rejected aversive control like a true member of Walden II when he said:

In the light of our present knowledge a school system must be called a failure if it cannot induce students to learn except by threatening them for not learning. That this has always been the standard pattern simply emphasizes the importance of modern techniques⁴⁹

Skinner did admit that aversive control *can* produce "well-disciplined, obedient, industrious, and eventually informed and skilled students."⁵⁰ But he also vividly described the unwanted by-products which make such a system so wasteful. Absenteeism and inattention are characteristic forms of escape or avoidance behavior. Impertinence and rudeness are mild forms of counterattack which may escalate to outright vandalism. Sullen inaction and stubborn unresponsiveness may be a combination of escape and counterattack. Fear, anxiety, anger, and resentment are the unwanted and destructive accompaniments of the typical reactions listed above. Skinner commented: "These are the classical features of juvenile delinquency [Sic], of psychosomatic illness, and of other maladjustments familiar to the administrations and health services of educational institutions."⁵¹

Like Frazier, Skinner argued that aversive techniques are unnecessary as well as objectionable. He stated clearly: "Not only can aversive practices be replaced, they can be replaced with far more powerful techniques."⁵² The techniques Skinner referred to, are of course, teaching machines and programmed learning.⁵³ In effect, he argued that they will help eliminate one of the worst shortcomings of the traditional system: failure to handle individual differences. He made his position clear:

Failure to provide for differences among students is perhaps the greatest single source of inefficiency in education. In spite of heroic experiments in multiple-track systems and ungraded schools it is still standard practice for large groups of students to move forward at the same speed, cover much the same material, and reach the same standards for promotion from one grade to the next. The speed is appropriate to the average or mediocre student. Those who could move faster lose interest and waste time; those who should move more slowly fall behind and lose interest for a different reason.⁵⁴

Skinner expressed the belief that teaching machines and programmed learning can remedy this situation. His faith in these techniques is as hopeful as Frazier's faith in inoculation against discouragement. Skinner commented:

. . . A teacher may supervise an entire class at work on such devices at the same time, yet each child may progress at his own rate, completing as many problems as possible within the class period. If forced to be away from school, he may return to pick up where he left off. The gifted child will advance rapidly, but can be kept from getting too far ahead either by being excused from arithmetic for a time or by being given special sets of problems which take him into some of the interesting bypaths of mathematics.⁵⁵

Thus the arguments from *Walden Two* are all found in *The Technology of Teaching*. Skinner repeated Frazier's major criticisms of traditional practices although he did not dwell on the age question. He expanded Frazier's objection to aversive techniques of control and his desire for individualized instruction. The one difference was Skinner's reliance on teaching machines and programmed materials. This difference however, is one of method not of objectives. Both Skinner and Frazier seek to employ techniques designed to facilitate individual growth and in the final analysis the following comment by Frazier should be considered carefully: "And by the way, I've very much misrepresented the whole system if you suppose that any of the practices I've described are fixed."⁵⁶ In other words, Frazier too might put his faith in teaching machines and programmed learning if he thought they would do the job. If he thought they could help men learn to live in freedom and peace, he would be their strongest advocate.

SUMMARY

In this chapter the nature of education in *Walden Two* was described. It was argued that in the book education is presented as an institutional process which will have great potential as a means of attaining social improvement if only certain major revisions in practices can be made. Four major criticisms of the present system were described along with the following four necessary improvements:

1. Education should involve more carefully designed and controlled experiences; 2. These experiences should be arranged for children when they can best profit from them; 3. They should be fully individualized; and 4. They should be encouraged through positive reinforcement only.

It was further argued that in *Walden Two* the aim of education is presented as beyond debate. It is taken for granted in *Walden Two* that the central aim of education is to create a strong future oriented culture by developing the individual talents and capacities of all members of the community as much as possible. No conflict was envisaged between developing happy individuals and good citizens.

Three intermediate aims were included in the description of the aims of education in *Walden Two*. They were: 1. preservation of motivation and the desire to learn; 2. teaching the techniques of learning and thinking; and 3. teaching techniques of self-control.

Evidence was then presented from *The Technology of Teaching* to indicate that Skinner agrees with Frazier's assumptions about educational aims and that he agrees with Frazier that present educational practices are outmoded and in need of revision. Statements were presented from *The Technology of Teaching* to indicate how closely

Skinner agrees with Frazier's four major criticisms. Skinner's reliance on teaching machines and programmed materials was noted but was not taken to be a sign of disagreement with any part of the *Walden Two* argument.

¹B. F. Skinner, *Walden Two* (New York: Macmillan Co., 1948), p. 114.

²*Ibid.*, p. 312. ³*Ibid.*, p. 114. ⁴*Ibid.*, p. 113.

⁵*Ibid.*, p. 114. ⁶*Ibid.* ⁷*Ibid.*, p. 292. ⁸*Ibid.*, p. 142.

⁹*Ibid.*, p. 107. ¹⁰*Ibid.*, p. 260. ¹¹*Ibid.*, p. 124.

¹²*Ibid.* ¹³*Ibid.*, p. 119. ¹⁴*Ibid.* ¹⁵*Ibid.*, p. 117.

¹⁶*Ibid.*, pp. 121-2. ¹⁷*Ibid.*, p. 119. ¹⁸*Ibid.*, p. 209.

¹⁹*Ibid.*, p. 29. ²⁰*Ibid.*, p. 208. ²¹*Ibid.*, p. 104.

²²*Ibid.*, p. 254. ²³*Ibid.*, p. 123. ²⁴*Ibid.*, p. 99.

²⁵*Ibid.*, p. 92. ²⁶*Ibid.*, p. 127. ²⁷*Ibid.*, p. 114.

²⁸*Life Magazine*, June 28, 1948, p. 38.

²⁹B. F. Skinner, *Walden Two* (New York: Macmillan Co., 1948), p. 105.

³⁰*Ibid.*, p. 114. ³¹*Ibid.*, p. 312.

³²B. F. Skinner, *The Technology of Teaching* (New York: Appleton-Century-Crofts, 1969), p. 232.

³³*Ibid.*, p. 91. ³⁴*Ibid.*, p. 236. ³⁵*Ibid.*, p. 235.

³⁶*Ibid.*, p. 162. ³⁷*Ibid.*, p. 148. ³⁸*Ibid.*, p. 155.

³⁹*Ibid.*, p. 168. ⁴⁰*Ibid.*, p. 116. ⁴¹*Ibid.*, p. 144.

⁴²*Ibid.*, p. 193. ⁴³*Ibid.*, p. 19. ⁴⁴*Ibid.*, p. 55.

⁴⁵*Ibid.*, p. 51. ⁴⁶*Ibid.*, p. 52. ⁴⁷*Ibid.*, p. 60.

⁴⁸*Ibid.*, p. 74. ⁴⁹*Ibid.*, pp. 57-8. ⁵⁰*Ibid.*, p. 101.

⁵¹*Ibid.*, p. 99. ⁵²*Ibid.*, p. 58. ⁵³*Ibid.*, pp. 21, 33, 65.

⁵⁴Ibid., p. 242. ⁵⁵Ibid., p. 24.

⁵⁶B. F. Skinner, *Walden Two* (New York: Macmillan Co., 1948),
p. 115.

⁵⁷Ibid., p. 312.

Chapter 6

SUMMARY OF THE STUDY

This thesis was an attempt to determine whether or not *Walden Two* provides the reader with reliable information about Skinner's views on some subjects relevant to education. The plan was to identify and describe educationally significant viewpoints which seem prominent in *Walden Two*, and to ascertain by referring to Skinner's nonfictional work whether or not he agrees with the positions as described.

Walden Two was carefully examined and a study of the critical literature directly related to the utopia was carried out to discover how others had interpreted the book. After a brief survey of Skinner's nonfictional work, *Walden Two* was re-examined with these interpretations in mind and important issues were selected for further consideration. What seemed to be prominent viewpoints in *Walden Two* were noted, and then a detailed examination of all of Skinner's available nonfictional writing was carried out in a search for evidence to indicate whether or not he actually agrees with these viewpoints. The results of this procedure were reported by describing three of the important viewpoints which had originally seemed to be inherent in *Walden Two*, and by providing evidence to indicate whether or not Skinner agrees with the positions described. This evidence was selected from the nonfictional

material which seemed to best represent Skinner's position on the relevant issues. It was assumed that support of the *Walden Two* positions in the nonfictional work would suggest that the utopia can provide the reader with accurate information about Skinner's views.

For Chapter Three it was necessary to consider the criticisms of society and the positive statements about *Walden II* which are found in the novel. Having done so it was possible to describe the conception of social improvement which seems to be embodied in *Walden Two*. This involved a description of the Good Life of *Walden II* and a description of the procedure envisaged as an effective way of achieving such a life. By referring to Skinner's nonfictional work it was possible to ascertain whether or not the position described can confidently be identified as essentially in agreement with Skinner's.

It was found that Skinner strongly supports the goodness of life in *Walden II* through direct statements. Of the eleven aspects of the Good Life mentioned in the summary of Chapter Three, only one was unsupported in the nonfictional work and that was government by benevolent experts. At the same time, nothing was found to indicate that Skinner would ever question the goodness of such a government, or for that matter, the goodness of any aspect of the ideal life depicted in *Walden Two*. The fact that no evidence was found indicating Skinner's support of aspects of the communal life style such as shared dining and toilet facilities seemed to indicate that he might question the necessity of such arrangements but no evidence was found to suggest that he questions the goodness of the quality of life in *Walden II*.

In the same summary it was noted that two things were presented as necessary to begin instituting such a Good Life,

cooperation and knowledge. Cooperative knowledgeable men were described as essential for the beginning of a utopian experiment and it was further noted that education and persuasion were described as being capable, through an evolutionary process, of bringing about the dominance of the utopian culture. It was found that Skinner agrees that it is possible to set up a small utopian experiment but no evidence was found to suggest that he actually believes such a community would survive much less become the dominant culture. Evidence was found to indicate that he considers the question purely hypothetical.

For Chapter Four it was necessary to examine all of what Frazier says in *Walden Two* which is relevant to the topic of human nature. Having done so it was possible to describe important aspects of the *Walden Two* conception of man by giving a detailed account of what Frazier says about human nature and its relationship to the control of behavior. By referring to *Science and Human Behavior* it was possible to determine whether or not Frazier's position, as described, is supported by Skinner.

It was found that of the six basic aspects of Frazier's conception of man mentioned in the summary of Chapter Four, Skinner clearly agrees with three, implicitly agrees with two more, and seems to disagree with one. First, he clearly agrees that man is a completely determined being: a self-determining organism controlled by his environment. On the second point Skinner is much more cautious but his nonfictional work generally tends to imply his agreement. He agrees that man cannot be effectively controlled by punishment and

that positive reinforcement can be used more effectively. The third point is the one which Skinner disagrees with Frazier on. He thinks the power of positive reinforcement can be horribly misused whereas Frazier thinks such a possibility is implausible and that the power of positive reinforcement ought not to be feared. The fourth point is one which Skinner must agree with to be consistent but is also one he does not mention in his nonfictional work; man not only can, but must revolt under certain environmental circumstances. The following two points were also found to be clearly supported by Skinner in his nonfictional work. He agrees that man needs to use an experimental science of behavior to gain new knowledge about human nature and its relationship to behavior, and that such knowledge will not change human nature.

For Chapter Five it was further necessary to analyse statements made in *Walden Two* relevant to the nature of education. After doing so it was possible to describe certain aspects of education as it is presented in Skinner's utopia. By reviewing some of the relevant statements made by Skinner in *The Technology of Teaching* it was possible to find out whether or not he agrees with the *Walden Two* view of education.

It was found that Frazier's four major criticisms of traditional education are all present to a greater or lesser degree in *The Technology of Teaching*. Skinner did not say much about education by selection or education in the years from birth to six, but he expanded a great deal on the failings of aversive techniques of control and on the need for more individualized instruction.

It was also found that Skinner agrees with Frazier's assumptions about the aims of education. He takes them for granted

and wants to get on to the problem of determining how to attain them. For Skinner and Frazier, education is supposed to promote cultural survival through the development of individual talents and abilities, and through the promotion of flexibility and diversity. Both Frazier and Skinner stress preserving motivation, teaching techniques of thinking and, teaching techniques of self-control.

In Chapters Three, Four, and Five then, Skinner was only found to disagree with one of twenty-nine viewpoints described as present in *Walden Two*. Three others were unsupported but were not contradicted, either directly or implicitly. It was found that he agreed with, and supported, the majority of the twenty-nine viewpoints.

One is able to conclude then that *Walden Two* can provide the reader with reliable information about Skinner's views on some topics relevant to education, but this needs to be qualified. In some cases, *Walden Two* seems not to have provided the reader with this kind of information. Skinner seems to feel that some of his critics have misinterpreted both *Walden Two* and himself, and one need only recall some of the literature reviewed in Chapter Two to realize that such misinterpretation has taken place. For example, A. Hacker, J. W. Krutch, and D. C. Williams all saw the Planners as having unlimited power to shape human nature. Krutch went the farthest in claiming that man in *Walden Two* is an unthinking, limitlessly plastic creature incapable of revolting. George Kateb also misinterpreted both *Walden Two* and Skinner when he argued in *Utopia and Its Enemies* that Skinner wants to reduce ethical training to habituation. Other examples could be provided but these make the point. Whether or not *Walden Two* provides the reader with reliable information about

Skinner's views seems to depend on the reader rather than on the nature of the source material. The critics who seemed to misinterpret Skinner's viewpoints on the basis of *Walden Two* presumably were familiar with, or at least had access to, Skinner's nonfictional writings, and still misinterpreted him.

One can finally conclude then, that *Walden Two* certainly *contains* reliable information about Skinner's views on topics relevant to education, but that it does not necessarily *provide* such information readily.

A more complete evaluation of the criticisms of *Walden Two* needs to be undertaken to determine what issues can most constructively be given the further philosophical treatment suggested by James E. McClellan in *The Encyclopedia of Philosophy* where he commented: "Skinner's arguments need to be removed from the context of his polemical novel, *Walden Two*, and treated with serious philosophical criticism."¹ Furthermore, a more complete comparison between Skinner's nonfictional work and *Walden Two* should be undertaken to clarify, as much as possible, the *extent* to which *Walden Two* reflects Skinner's viewpoints. Such a study would provide a needed expansion of arguments found in *Walden Two*. It might also be structured to clarify whether or not an evolutionary process is evident in Skinner's work. It seems possible that Skinner raised questions in *Walden Two* that he himself is still trying to answer.

¹James E. McClellan Jr., "Philosophy of Education, Influence of Modern Psychology on," *The Encyclopedia of Philosophy* (1967), XI, p. 246.

BIBLIOGRAPHY

BOOKS

- Evans, R. I. *B. F. Skinner: The Man and His Ideas*. New York: E. P. Dutton & Co., 1968.
- Ferster, C. B. and B. F. Skinner. *Schedules of Reinforcement*. New York: Appleton-Century-Crofts, 1957.
- Holland, James G. and B. F. Skinner. *The Analysis of Behavior*. New York: McGraw-Hill, 1961.
- Kateb, George. *Utopia and Its Enemies*. New York: Free Press of Glencoe, 1963.
- Komissar, Paul and C. B. J. MacMillan (eds.). *Psychological Concepts in Education*. Chicago: Rand McNally & Co., 1967.
- Krutch, Joseph Wood. *The Measure of Man: On Freedom, Human Values, Survival and the Modern Temper*. New York: Charter Books, 1962.
- Manuel, Frank E. (ed.). *Utopias and Utopian Thought*. Boston: Beacon Press, 1967.
- Nash, Paul and others (eds.). *The Educated Man: Studies in the History of Educational Thought*. New York: John Wiley & Sons, 1965.
- Negley, Glenn and J. Max Patrick. *The Quest for Utopia: An Anthology of Imaginary Societies*. New York: Henry Schuman, 1952.
- Nelson, William (ed.). *Twentieth Century Interpretations of Utopia: A Collection of Critical Essays*. Englewood Cliffs, New Jersey: Prentice-Hall, 1968.
- Ozmon, Howard. *Utopias and Education*. Minneapolis: Burgess, 1969.
- Parrington, Vernon L. *American Dreams: A Study of American Utopias*. New York: Russell & Russell, 1964.
- Rhodes, Harold V. *Utopia in American Political Thought*. Tucson: University of Arizona Press, 1967.
- Skinner, B. F. *The Behavior of Organisms: An Experimental Analysis*. New York: Appleton-Century-Crofts, 1938.
- _____. *Contingencies of Reinforcement: A Theoretical Analysis*. New York: Appleton-Century-Crofts, 1969.
- _____. *Cumulative Record*. New York: Appleton-Century-Crofts, 1959.
- _____. *Science and Human Behavior*. New York: Free Press, 1953.

- _____. *The Technology of Teaching*. New York: Appleton-Century-Crofts, 1968.
- _____. *Verbal Behavior*. New York: Appleton-Century-Crofts, 1957.
- _____. *Walden Two*. New York: Macmillan Co., 1948.

ARTICLES AND PERIODICALS

- Hacker, Andrew. "Dostoevsky's Disciples: Man and Sheep in Political Theory," *Journal of Politics*. 17:590-613, November, 1955.
- _____. "In Defence of Utopia," *Ethics*. 65:135-8, January, 1955.
- _____. "The Specter of Predictable Man," *Antioch Review*. 14:195-207, June, 1954.
- Hall, Mary Harrington. "An Interview with 'Mr. Behaviorist' B. F. Skinner," *Psychology Today*. 1:21-23 and 68-71, September, 1967.
- Israel, Mathew L. "A Science of Behavior: Its Applications and Implications," *Humanist*. 18:12-23, January-February, 1958.
- Kaufman, Arnold S. "The Aims of Scientific Activity," *Monist*. 52:374-89, July, 1968.
- Klaw, Spencer. "Harvard's Skinner: The Last of the Utopians," *Harpers*. 226:45-51, April, 1963.
- Life Magazine*, June 28, 1948, p. 38.
- McClellan, James E. Jr. "Philosophy of Education, Influence of Modern Psychology on," *Encyclopedia of Philosophy*, 1967, VI, 243-46.
- Paske, Gerald H. "Functional Analysis and Self-Control," *Educational Theory*. 14:314-22, October, 1964.
- "Professor Skinner without his pigeons," *Times Educational Supplement*. 2715:1887, Friday, June 2, 1967.
- Rogers, Carl and B. F. Skinner. "Some Issues Concerning the Control of Human Behavior," *Science*. 124:1057-1066, November 30, 1956.
- Skinner, B. F. "The Design of Cultures," *Daedalus*. 90:534-46, Summer, 1961.
- _____. "Man," *Proceedings of the American Philosophical Society*. 108:482-85, December, 1964.

- _____. "Operant Behavior," *American Psychologist*. 18:503-515, August, 1963.
- _____. "Utopia and Human Behavior," *Humanist*. 27:120-122 and 136-137, July-August, 1967.
- _____. "Utopia Through the Control of Human Behavior," *Listener*. 77:55-56, January 12, 1967.
- _____. "Visions of Utopia," *Listener*. 77:22-23, January 5, 1967.
- _____ and B. Blanshard. "The Problem of Consciousness -- A Debate," *Philosophy and Phenomenological Research*. 27:317-337, March, 1967.
- Viteles, Morris S. "The New Utopia," *Science*. 122:1167-71, December, 1955.
- Weber, Eugene. "The Anti-Utopian of the Twentieth Century," *South Atlantic Quarterly*. 58:440-447, Summer, 1959.
- Williams, Donald C. "The Social Scientist As Philosopher And King," *Philosophical Review*. 58:345-359, 1949.

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